

Respect the Rio Annual Report 2004

Dispersed Recreation Component



**Santa Fe National Forest
April 2005**



Respect the Rio Annual Report 2004:
Dispersed Recreation Component

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Introduction

What is Respect the Rio?

Respect the Rio is a multi-faceted restoration and education program designed to balance the need for preservation of riparian and floodprone areas with needs of the public. It seeks to do this by accomplishing the following goals:



1. Identifying and addressing water quality issues that have developed from recreational use
2. Educating the public about habitat, habitat needs and on-going restoration projects
3. Creating a program and materials that are easily adaptable to other forests and agencies
4. Creating community partnerships

Where did Respect the Rio come from and where is it going?

Respect the River originated in the USDA Forest Service Pacific Northwest Region on Methow Valley Ranger District, Okanogan National Forest in 1993. In Methow Valley Ranger District, over one hundred degraded and “unofficial” or dispersed campsites were scattered near prime salmon spawning habitat in the headwaters of Columbia River. Many had been used by generations of locals and visitors. Recognizing that closing well-loved areas would be both unpopular and unfortunate, the USDA Forest Service searched for an alternative. The result was Respect the River, a program created to improve fish habitat and protect endangered fish species while reducing the impacts of recreation in riparian areas but still providing recreational experiences.

Friendly to both fish and people, Respect the River works on two fronts: education and restoration. It uses Contact Rangers, newspaper and radio ads, brochures, interpretive signs, and other outreach means in combination with restoration treatments such as fence and boulder barriers, scarification, and re-vegetation. Only through education will recreationists understand the importance of protecting riparian and riverine habitats and take ownership in conserving and restoring those areas across the region. New illegal roads, user trails, or dispersed campsites have declined in Pacific Northwest Respect the River focus areas since the program’s inception. Quality of camping has improved; sites are better defined, smaller and more vegetated. Less trash and human waste is found. Soil and vegetation damage caused by illegal motorized vehicle use has dramatically decreased. Bank erosion and illegal firewood cutting have decreased. Recreationists are parking their vehicles and RVs away from the stream banks and helping water re-vegetated sites. Most importantly, campsites have remained open and recreationists are receiving a consistent message.



Today, the program has expanded to include Okanogan-Wenatchee National Forest, Umatilla National Forest, Mount Baker-Snoqualmie National Forest, Lewis and Clark National Forest, Gifford Pinchot National Forest, Mt. Hood National Forest, and Columbia River Gorge National Scenic Area. The Santa Fe National Forest in the Southwestern Region puts a Hispanic spin on the program

by calling it Respect the Rio. Other agencies such as the National Park Service (in Glen Canyon National Recreation Area) and the Washington Department of Fish and Wildlife are starting Respect the River programs, and interest in this award-winning program continues to increase internationally (Mexico and Canada).

Santa Fe National Forest and Guadalupe Watershed

Santa Fe National Forest includes 1.6 million acres in the heart of north-central New Mexico. Within the forest's borders are lush meadows, miles of mixed conifer and aspen trees, and a dormant volcano with a 15-mile wide crater (Valles Caldera National Preserve). Visitors enjoy camping, fishing, hiking, and many other outdoor recreation activities while residents maintain their traditional and cultural uses of the national forest and forest products. Santa Fe National Forest varies in altitude from 6,000 feet above sea level to the summit of Truchas Peak, located in Pecos Wilderness, at 13,103 feet. The Forest includes 291,669 acres of designated wilderness and approximately 1,000 miles of perennial streams and rivers, waters responsible for the abundant wildlife and human habitation to be found in the area.

According to the National Visitor Use Monitoring project conducted in 2003, there were 1,356,154 forest visitors. In addition, there were 1,522,307 site visits to day use and overnight developed areas and 64,956 visits to wilderness areas. Visitors were 58% male and 42% female. The top five activities visitors participated in were viewing natural features, hiking/walking, relaxing, viewing wildlife, and driving for pleasure.

Table 1. Percentage of Santa Fe National Forest visitors by age class.

Age Class	Percent
Under 16	18.7%
16 to 19	2.7%
20 to 29	11.9%
30 to 39	16.7%
40 to 49	20.8%
50 to 59	18.3%
60 to 69	6.8%
70+	4.1%

The Walatowa Visitor Center is owned by the Jemez Pueblo and jointly staffed by Forest Service personnel. The visitor center is considered the “gateway” to the Guadalupe Watershed – the Respect the Rio corridor. There were 25,797 people who stopped in at the visitor center in 2003 and 35,536 people in 2004, an increase of 37.8%.

Guadalupe Watershed drains the south Jemez Mountains, is fully contained within Cuba and Jemez Ranger Districts, and includes Rio de las Vacas, Rio Cebolla, and Rio Guadalupe. Over 50 miles of perennial

streams in Guadalupe Watershed eventually flow into Jemez River and then into Rio Grande. Rio de las Vacas begins as a tiny channel high in San Pedro Parks Wilderness Area, within Cuba Ranger District, and flows south until it meets the narrow Rio Cebolla at the Porter area to form the larger Rio Guadalupe, within Jemez Ranger District. Guadalupe Watershed starts as high mountain meadow habitat draining snow and rain off the Jemez Mountains to flow south through mixed conifer and aspen forests. This river system slowly drops into ponderosa pine, and then is channeled into piñon-juniper habitat of semi-arid canyon systems before its confluence with Jemez River beyond the boundary of Santa Fe National Forest. A portion of the watershed, the Forest Road 376 corridor, falls within the boundaries of the Jemez National Recreational Area. Guadalupe Watershed is a 5th code watershed within the 4th code Jemez Watershed (see Figure 1). Of the 171,195 acres within Guadalupe Watershed, the Santa Fe National Forest manages 99.4% (170,241 acres).

Impairments to Guadalupe Watershed

Guadalupe Watershed is designated as an impaired watershed by New Mexico Environment Department, Surface Water Quality Bureau (NMED-SWQB) through regulations established by the Clean Water Act (Section 303), 1977. The Clean Water Act makes states responsible for testing and monitoring watersheds using a Total Maximum Daily Load (TMDL) system. According to Environmental Protection Agency (EPA), the entity responsible for enforcing the Clean Water Act, “A TMDL...is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant’s sources.”¹ In short, a TMDL is a kind of water-safety budget in which only a certain number of pollutants can be deemed acceptable in a certain stream, lake, or bay, and if some pollutant exceeds the budgeted amount, action must be taken to improve it.

Under New Mexico’s TMDL system, Guadalupe Watershed has shown the following impairments within Respect the Rio’s project area:

- Rio Guadalupe has exceeded state standards for turbidity, metals (chronic aluminum), and stream bottom deposits;
- Rio Cebolla has exceeded state standards for stream bottom deposits;
- Rio de las Vacas has exceeded state standards for temperature and Total Organic Carbon (TOC) loads (see Appendix A for more impairment information)

Santa Fe National Forest manages over 99% of Guadalupe Watershed and must respond to these water quality impairments. Two NMED-SWQB/EPA grants were procured for this watershed to begin addressing impairments, and a third grant has been awarded to begin in fall 2005. Since all but chronic aluminum impairments can be linked to dispersed recreational use along this watershed, Respect the Rio began laying the groundwork for watershed restoration and education that began in 2003 and will continue in future years.

¹ <http://www.epa.gov/owow/tmdl/intro.html>

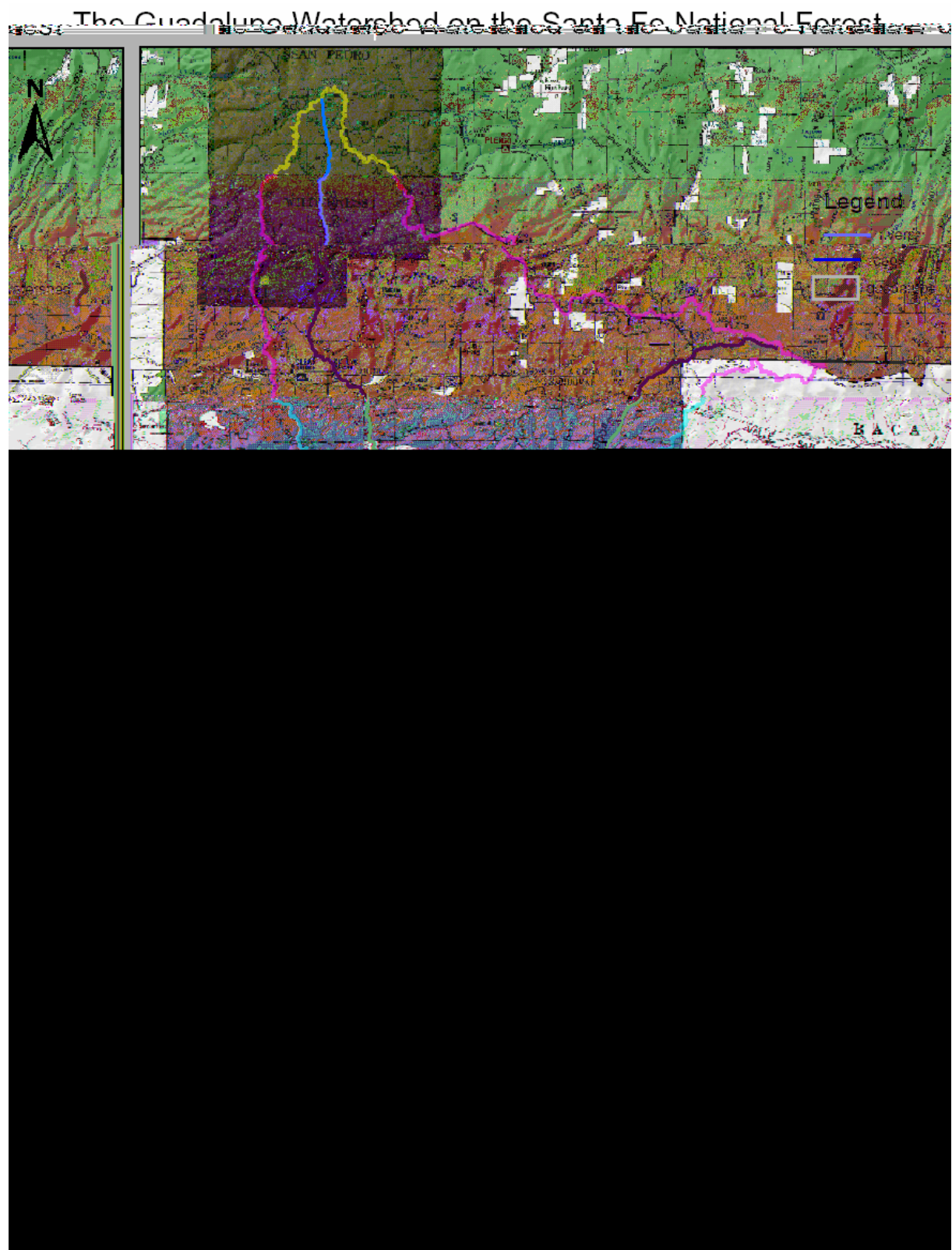


Figure 1. Map of Guadalupe Watershed with inset showing location within Santa Fe National Forest.

Executive Summary

The Contact Ranger program is a small yet very important tool of the Respect the Rio program. Without it, we lose a critical component – public understanding and support. The public can make or break efforts put forth by the Forest Service to improve riparian habitats and water quality. When the public is informed about what is happening and why, there is usually support for the projects at hand. This support can be seen in public compliance with new regulations, respect for restoration sites, and efforts to promote the program's overall goal. On the other hand, when the public sees changes in regulations and sites without knowing what is being done or why, they have a tendency to “rebel” against the changes. The public can undo restoration efforts, costing the Forest Service more time, money, and effort to reach our goal.

During the first two years of the Contact Ranger program, the education crew directly contacted 3,350 dispersed campers and recreationists. An additional 945 visitors were reached at developed campsites through interpretive programns
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- A total of 90 groups of the 383 groups contacted had at least one type of off-road equipment: ATVs, dirt bikes, bicycles, or others;
- Only a small percentage (8.4%, 32 groups) of the 383 groups within the watershed had heard of Respect the Rio.

Between fall 2003 and fall 2004, the Respect the Rio program focused on modifying several dispersed campsites within the Guadalupe Watershed. The Rio Guadalupe corridor was the first to see changes thanks to the Motorized Vehicle Use Closure (see Appendix C). A total of 1,438 feet of buck and pole fence, 222 boulders, and 29 berms were installed within the Rio Guadalupe corridor. In addition, 36 signs were put up in conjunction with the modifications. The signs ranged from official Forest Service closure signs to Respect the Rio interpretive signs.

Compliance with the Guadalupe Motorized Vehicle Use Closure is tied directly to education of the public through Contact Rangers and interpretive signage. While there is some non-compliance, this behavior should be reduced over time as more individuals learn about the Respect the Rio program and its goals.

While there was no official closure signed for the Rio de las Vacas corridor, the Cuba Ranger District decided to modify several dispersed campsites. Many of these campsites had access roads that ford the stream in multiple locations.

Several riparian and wetland restorations projects were completed within the Guadalupe Watershed:

- The lower two miles of Rio de las Vacas was the site of a major stream habitat improvement project.
- A series of springs, located west of Rio Cebolla, were reconnected to their original wetland by installing three French drains under Forest Road 376.
- A larger French drain was installed under a popular dispersed camping access road to reduce the amount of resource damage to the wet meadow.
- In addition two 3-foot culverts on Forest Road 376 were replaced by two 16-foot bottomless arches at the two junctions of Forest Road 376 and Rio Cebolla to allow for a more natural water flow and to accommodate high spring flows and fish dispersal.

As the Contact Ranger program continues in the summer of 2005, we should expect an increase in the number of groups familiar with the Respect the Rio program. In addition, the recently signed (February 2005) Rio Cebolla Motorized Vehicle Use Closure will allow for modifications of more dispersed camping and recreation sites. There will also be campsite re-modifications along Rio Guadalupe to accommodate suggestions made by the public. As sites are modified, interpretive signage will also be installed.

Overview of Methods

In 2003, Santa Fe National Forest's Respect the Rio crew conducted a Dispersed Campsite Inventory within the Guadalupe Watershed. Dispersed Campsite Inventory data collected helped identify dispersed campsites, which were the focus of the Contact Ranger Program (see Appendix A for a definition of terms).

The Contact Ranger Program began in the summer of 2003 and was the first of its kind on the Santa Fe National Forest. A social survey form was created for social data collection and as a guide to educate Forest campers, anglers, all-terrain vehicle (ATV) users, and other recreationists about river-friendly camping methods. Social survey questions were developed by Jemez Ranger District Recreation Staff in order to plan visitor-friendly riparian restoration projects within the Guadalupe Watershed. These questions led to discussions of how the Forest may be changing management in the area, pulling vehicles off rivers, getting trash out of the corridor, keeping human waste out of river systems, minimizing campfire impacts, and other watershed health issues. A river-friendly camping flyer (see Appendix B, Figure B1) was passed out to most groups contacted throughout the summer. In Fall 2004, the flier was translated into Spanish for use during the 2005 Contact Ranger program (see Appendix B, Figure B2).

Continuing in 2004, the Contact Ranger Program modified its approach of gathering data to disseminating information. Instead of asking campers what changes they have noticed and what changes they would like to see, Contact Rangers informed campers of restoration projects and changes happening in the area. Campers still received a "Be a River-Friendly Camper" flyer, and children received a Respect the Rio temporary tattoo.

The 2004 social survey form was tailored to gather basic data such as the number of people camping, how long they were staying, where they live (i.e. zip code), and if they had camped in the area before (see Appendix B, Table B1). Some items such as camping type (i.e. tent, motor home, pop-up trailer, etc.), vehicles (anything with wheels that can be driven, pulled, or ridden in), and recreational activity (i.e. fishing, bicycling, off-road vehicle use, hiking, etc.) had been subdivided to make data user-friendly (see Appendix B, Table B2).

Contact Rangers were conducting social surveys and disseminating information Saturdays and Sundays between Memorial Day weekend to Labor Day weekend. Due to extreme fire conditions, parts of the Santa Fe National Forest (including Guadalupe Watershed) were closed to the public from June 17 to July 1, 2004. During that time, the Contact Ranger Program was on hold.

Contact Ranger Program

Social Survey Results

In its second year, the Respect the Rio's Contact Ranger program focused on educating visitors about river-friendly camping methods (see Appendix B, Figure B1) and informed visitors of current restoration projects. Many dispersed campsites along Rio Guadalupe, Rio Cebolla, and Rio de las Vacas had been modified between fall 2003 and fall 2004 (see Dispersed Campsite Modification section, page 27, for details).

The Respect the Rio Contact Ranger crew consisted of two Student Conservation Association interns (Sarah Martiny and Alex Kirkpatrick) and their supervisor, the Forest Education Coordinator (Kimberly Kelly). Contact Rangers talked with visitors at least some portion of every Saturday and Sunday from Memorial Day to Labor Day in order to educate them about river-friendly camping and restoration projects and to gather social data. Contact Rangers were trained not only in how to gather social data, but also in how to approach people and make them comfortable enough to discuss openly their opinions of Guadalupe Watershed's future (see Photo 1).



Photo 1. Contact Ranger Alex Kirkpatrick hands a young camper a Respect the Rio temporary tattoo (8 September 2004).

Motor Vehicle Closure

The main focus of the 2004 Contact Ranger season was to inform visitors of the new motorized vehicle closure that would affect campers and recreationists along the Rio Guadalupe. The closure also gave Forest Service personnel an opportunity to alter dispersed campsites and to modify recreational behavior (see Dispersed Campsite Modifications, page 27, for details).

On June 1, 2004, Forest Supervisor Gilbert Zepeda signed a motorized vehicle use closure order for the 7-mile stretch of Forest Road 376 along Rio Guadalupe from the Gilman Tunnels to Porter Landing (see Appendix C). The closure states, “It is prohibited to possess or use a motorized vehicle off Forest Road 376 between the road and the river...” Visitors are allowed to park within 30 feet of the edge of the roadway or in designated parking areas or pullouts.

A similar closure for the 4-mile stretch of Forest Road 376 along Rio Cebolla from Porter Landing to the corrals in Lake Fork Canyon was signed into effect on February 16, 2005 (see Appendix D).

Visitor Statistics

Social surveys were done for each campsite group (not each individual), which usually had one or two unofficial “spokespersons.” Data gathered was not weighted by number of people in each group. Numbers in this report are based on information visitors provided or on observations made by Contact Rangers. When sites were occupied but visitors were absent, Contact Rangers had to rely solely on observation. Also, Rio Cebolla was a predetermined area of concern for Respect the Rio and was surveyed every other weekend, or twice as often as Rio Guadalupe and Rio de las Vacas. This should be noted when considering total numbers in charts.

Some general use statistics help paint a picture of visitors to Guadalupe Watershed.

- Total number of individuals contacted during the 2004 Respect the Rio Contact Ranger program was 1,862.
- Total number of groups contacted during the 2004 Respect the Rio Contact Ranger program was 383.
- An average of 6.8 people per site was noted with a maximum of 40 and minimum of 1.
- Average number of nights stayed when a group was confirmed as camping overnight was 2.22. Longest stay was 13 nights; shortest was 1.
- There were 34 groups (137 people) confirmed as day users with 233 groups (1,675 people) confirmed as overnight campers.

Visitors to Guadalupe Watershed were asked where they were from in order to determine target audiences for future Respect the Rio education outreach. If visitors answered “Albuquerque,” they were also asked within what zip code they lived. Most visitors were comfortable giving out zip code information. Answers that were another town in New Mexico or another state were noted as names, with zip codes for New Mexican towns looked up later by the crew. If a site was occupied, but no one was present, the Contact Rangers recorded the state from license plates if a vehicle was present. Figure 2 shows the breakdown of visitors’ home areas.

The figures in the following section show data from the years 2003, 2004, and 2003-2004; however, the text focuses on 2004 data.

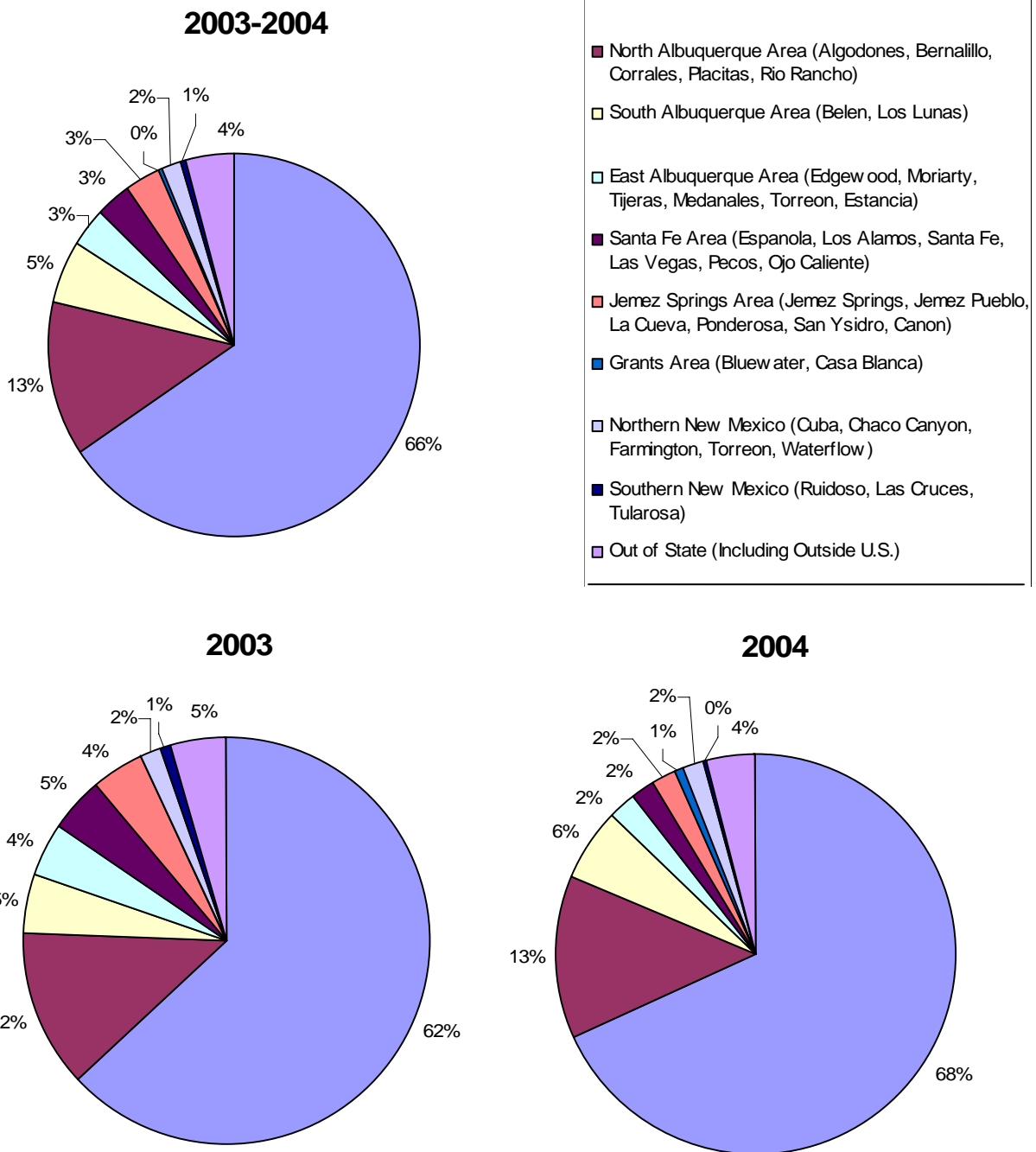


Figure 2. Residential demographics of visitors to Guadalupe Watershed for the years 2003, 2004, and 2003-2004.

The smallest percentages of visitors to Guadalupe Watershed in 2004 (each less than 5%) were from Jemez Springs area (6 groups of visitors), Santa Fe area (6 groups) northern New Mexico (5 groups), Grants area (2 groups), and southern New Mexico (1 group).

About 6 % of the visitors came from the south Albuquerque area (18 groups), and 13% came from the north Albuquerque area (41 groups). The largest percentage of visitors came from

Albuquerque (208 groups). In all, the Albuquerque Area (including Albuquerque proper) represented 89% of all Guadalupe Watershed visitation. Albuquerque residents are broken down further into zip codes representing northeast, northwest, southeast, and southwest areas of the city. These geographic divisions are roughly defined by north-south running I-25 and east-west I-40 (see Figure 3).

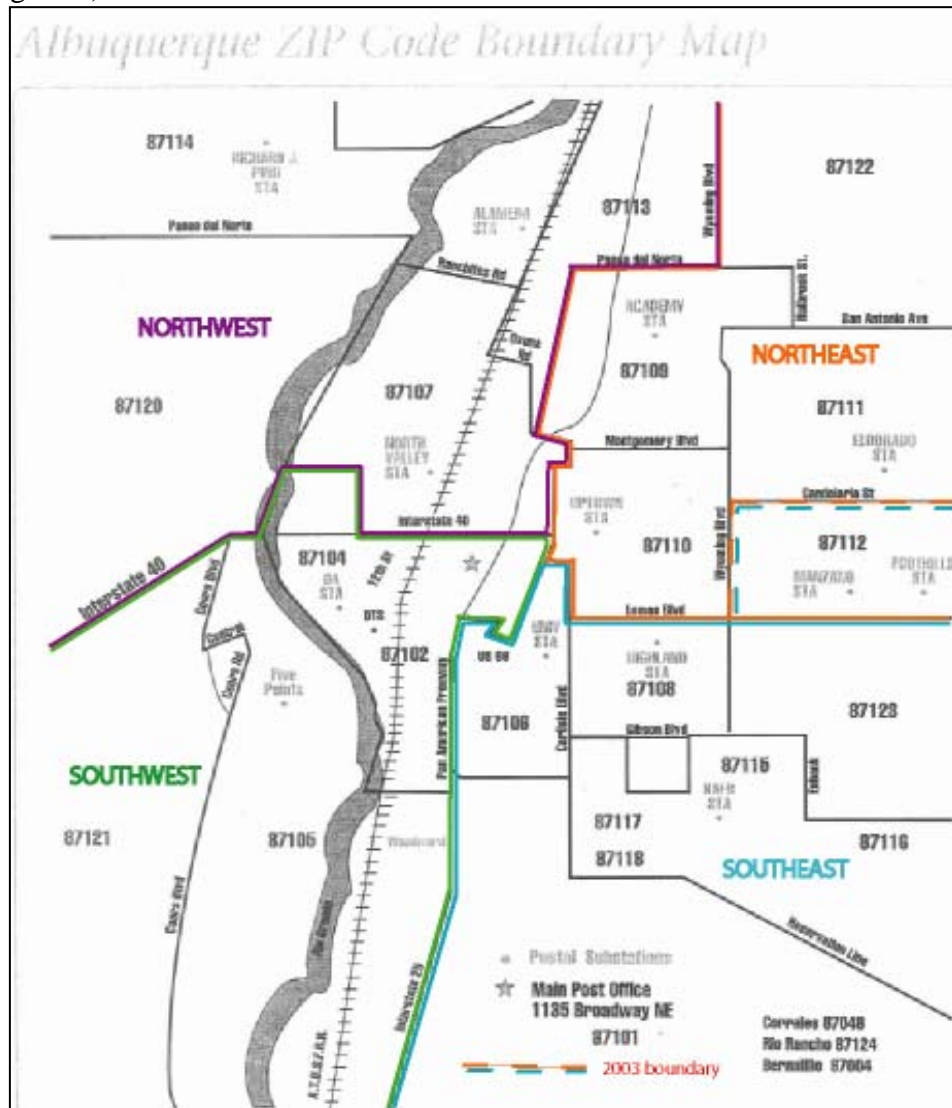


Figure 3. U.S. Postal Service Albuquerque zip code map (taken from City of Albuquerque phone-book) with general northeast, northwest, southeast, and southwest subdivisions.

Zip codes representing northeast Albuquerque include 87109, 87111, 87122, 87112 and 87110; northwest include 87114, 87120, 87107, and 87113; southeast include 87108, 87123, 87115, 87116, 87117, 87118, and 87106; southwest include 87104, 87102, 87121, and 87105. Several zip codes were from unknown regions of Albuquerque since they are for postal boxes only including 87193, 87101, and 87154.

Most Albuquerque area residents visiting Guadalupe Watershed in 2004 hail from the west side. Southwest and northwest areas account for 53% of visitors coming from the Albuquerque area (see Figure 4). In contrast, the east side accounts for only 34% of this urban Rio Guadalupe visitation. Future education outreach should consider these visitor demographics.

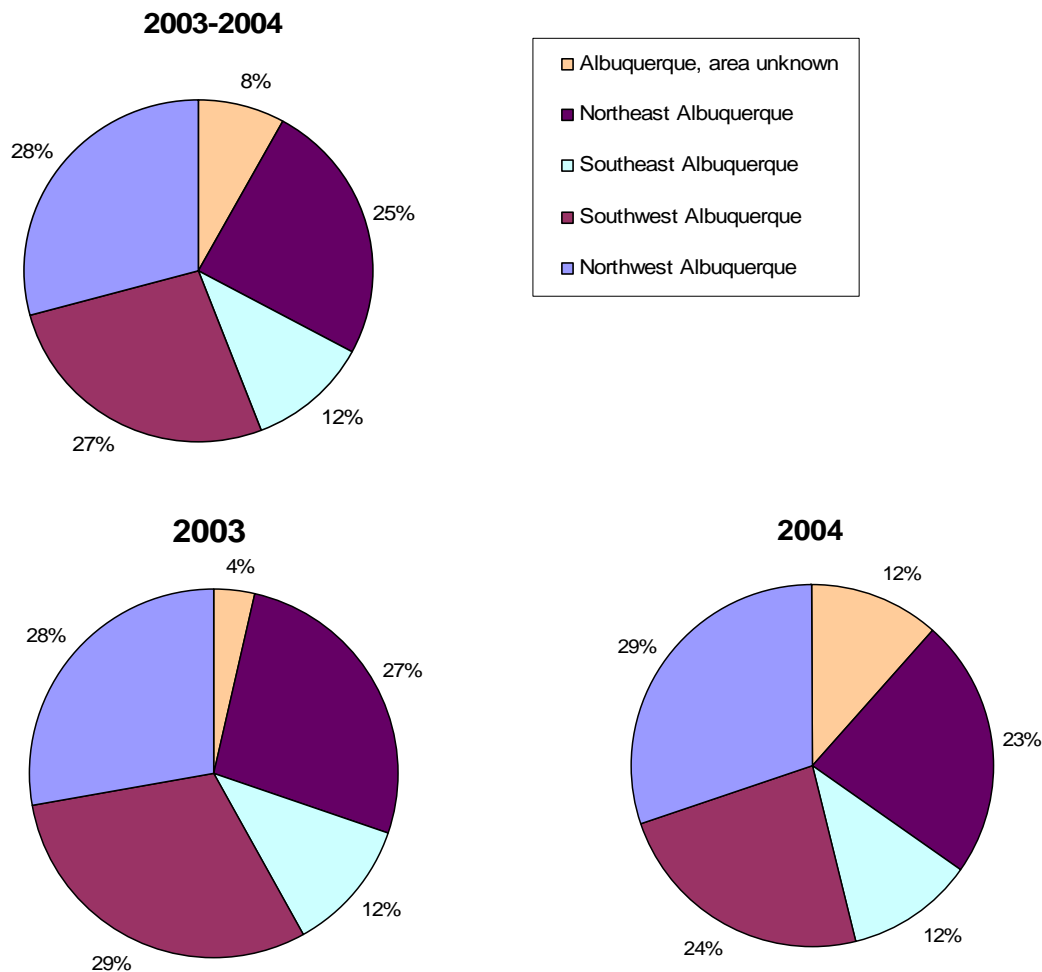


Figure 4. Residential demographics of Albuquerque visitors for the years 2003, 2004 and 2003-2004.

Group Size

The overall average group size for the Guadalupe Watershed was 6.8 people per group (see Table 2). Rio Cebolla had the highest average group size (7.3 people per group), and Rio Guadalupe had the lowest (4.9 people per group). These averages are reflective of the amount and size of camping areas available within each corridor.

Table 2. Total number of people and groups for each river corridor.

Stream Corridor	# of People	Minimum # of People	Maximum # of People	# of Groups	Average # of People/Group
Rio Cebolla	1422	1	40	194	7.3
Rio Guadalupe	187	1	14	38	4.9
Rio de las Vacas	203	1	20	35	5.8
Total	1812	1	40	267	6.8

Camping Type

Contact Rangers noted visitors' camping type as tent, motor home, camp trailer, pop-up trailer, pick-up camper, or other. All types of camping were recorded with the number of each type. For example, a site with two tents and one pop-up trailer was recorded as T2, PT1 (see Appendix B, Table B1). Many camping complexes accommodated multiple types of camping throughout the summer.

Type of camping seen in the corridor is important since tents and RV's (motor homes, camp trailers, and pop-up trailers) affect campsites differently. For instance, RV campers need a large, flat space for entering with large vehicles and for turning around. Many dispersed campsites have a U-shaped drive with one way in and another way out, often to allow RV access. Thus, parking and sedimentation impacts may be higher for RV-popular complexes.

RV's often contain a toilet that can be flushed clean at a proper sanitation site while tent campers rarely use portable toilets for camping. Tent camping may impact fecal coliform counts in rivers. We do not assume that RV's are not dumping their septic or gray water in the river.

Camp trailers and pop-up trailers are distinguished from motor homes in that a vehicle (generally a large one) is needed to pull both types of trailers. Often times, the trailer is detached so visitors can explore the forest with their vehicle. Motor homes do not allow for such use, unless a vehicle (generally a small one) is towed behind the motor home.

Overall, Contact Rangers counted 408 tents and 291 RV's (motor homes/trailers/campers) along the three streams during the 2004 survey (see Table 3). The noticeable discrepancy between tents and RV's along Rio Guadalupe is due to the geography of the area and vehicle closure.

Table 3. Total number of each camp housing type seen in each of the river systems.

Stream Corridor	Tents	Motor Homes	Camp Trailers	Pop-up Trailers	Pick-up Campers	Others *
Rio Cebolla	327	36	113	70	17	7
Rio Guadalupe	48	1	4	2	0	0
Rio de las Vacas	33	4	27	6	3	1
Total	408	41	144	78	20	8

*Others include modified vans, sleeping in the back of a pickup, or sleeping in a car.

In all, 118 groups were camping in RV's, 134 were camping in tents, and 74 groups were using a combination of tents and RV's (see Figure 5). Rio Cebolla showed an even split between tent only (38.7%) and RV only (36.7%) camping. Rio de las Vacas campers had the highest percentage (55.8%) of RV only camping. Rio Guadalupe camping was mostly with tents (85.2%) and had no RV only camping. The Motor Vehicle Closure greatly reduced RV camping. There are only a few pullouts large enough to allow RV camping. Several groups, especially along Rio Cebolla, camped in both RV's and tents. Because groups often had more than one RV or tent at a campsite, actual number of RV's and tents in the corridor is much higher (see Table 3).

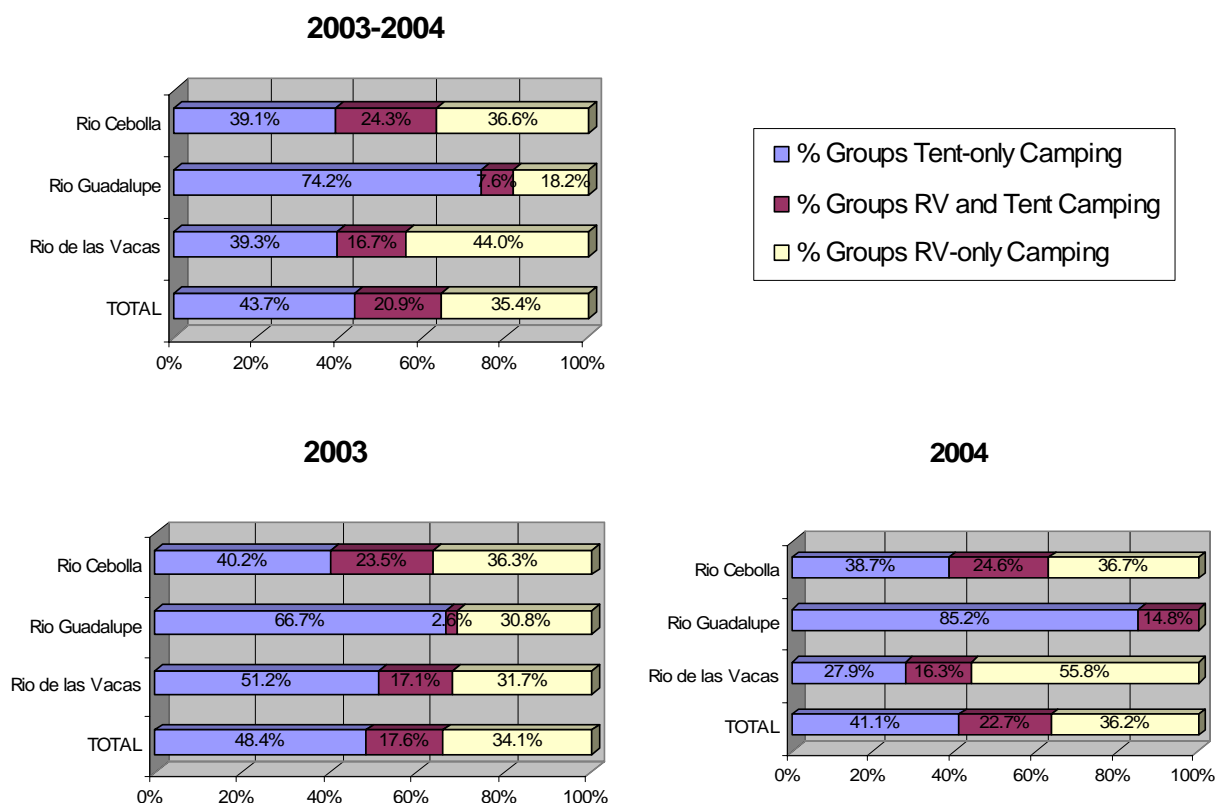


Figure 5. Percentage of groups camping with tents only, both RVs and tents, or RVs only within each river system.

Overall, tents were far more numerous than any other type of camping shelter found within the Guadalupe Watershed (see Table 3). Camp trailers and pop-up trailers were the most popular types of RV's. This could be because the vehicle pulling the trailer can be detached and used as a means of transportation through the forest. Other camp housing types included converted Volkswagon vans and people camping inside their vehicle.

Vehicle Use

Numbers and types of vehicles were also noted on the social survey form (see Table 4). Categories included vehicles (cars, SUV's, and trucks), motor homes, camptailers, pop-up trailers, flatbed trailers, dirtbikes, bicycles, and others.

Of the total vehicles counted, there were 787 passenger vehicles (cars, trucks, SUV's), 262 trailers (camp trailers, pop-up trailers, and flatbed trailers), 114 ATVs, and 139 others (dirtbikes/motorcycles, bicycles, etc.) transporting visitors within the Guadalupe Watershed.

Table 4. Total number of each vehicle type noted in each corridor.

Stream Corridor	Vehicles*	Trailers**	ATVs	Other***
Rio Cebolla	619	214	84	127
Rio Guadalupe	85	7	2	1

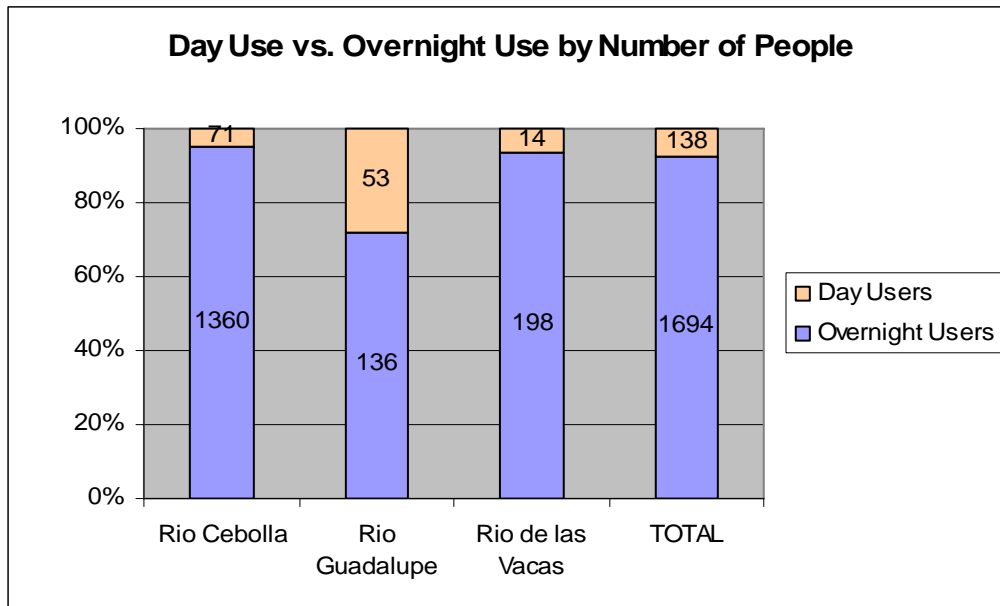


Figure 7. Proportion of camping and day-use groups by river system.

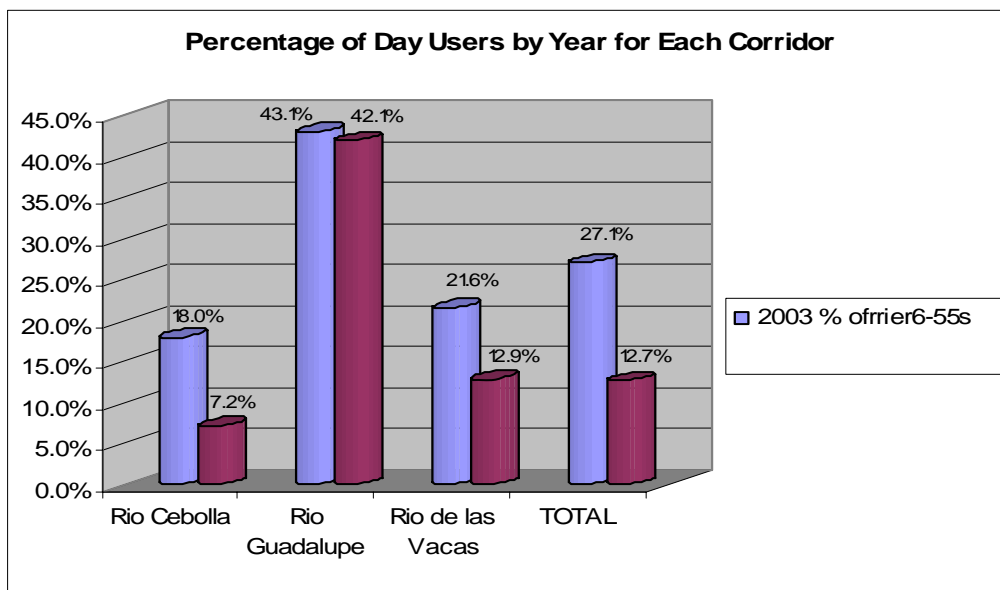


Table 5. Duration of stay by group within each corridor.

Stream Corridor	Duration by Group							
	Day Use	1 Night	2 Nights	3 Nights	4 Nights	5 Nights	6 Nights	7+ Nights
Rio Cebolla	15	31	104	32	11	3	0	1
Rio Guadalupe	18	9	8	4	1	0	0	0
Rio de las Vacas	5	11	18	1	1	0	1	0
TOTAL	38	51	130	37	13	3	1	1

Many of the visitors to the Guadalupe Watershed have visited the area before. Overall, 52.7% of the visiting groups returned to a campsite within the same river corridor. Rio de las Vacas (64.0%) had the highest percentage of returns. Rio Cebolla had 53.0% returnees and Rio Guadalupe had 40.7% returnees. The vehicle closure along Rio Guadalupe forced many groups that usually camped in that area to find new sites.

Visitor Activities

Both campers and day users described a wide variety of recreational activities that attracted them to the corridor during summer months (see Figure 9). Popular activities included camping (43%), fishing (22%), hiking (16%), off-highway vehicle (OHV) use (8%), playing horseshoes (4%), swimming (3%), bicycling (3%), social events-reunions or weddings (1%) and picnicking (<1%).

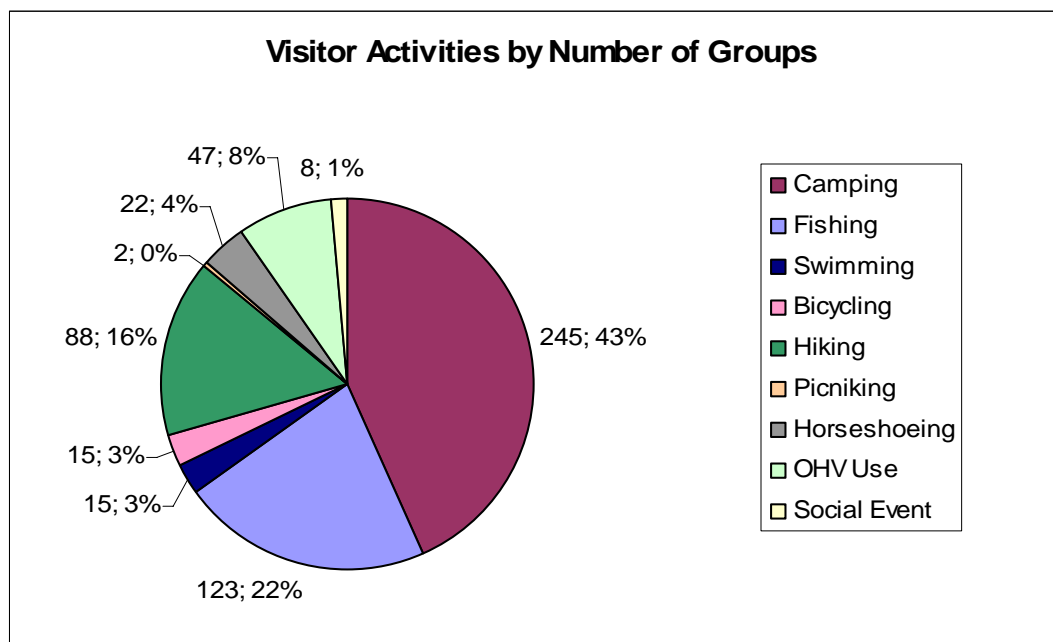
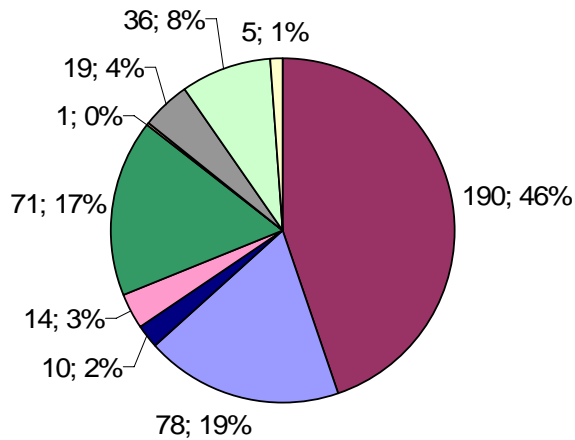


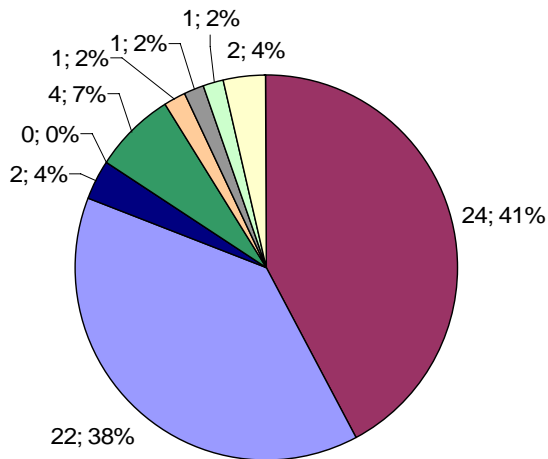
Figure 9. Total number of groups and percentage of each activity type within the Guadalupe Watershed.

Visitors' activities within each river system shows how each area is more conducive to different types of activities (see Figure 10). By looking at predominant activities along each river corridor, Forest Service resource personnel can better manage each area. For example, Rio Guadalupe has a higher percentage of groups fishing (38%), and Rio Cebolla and Rio de las Vacas have higher percentages of groups hiking (17% and 15% respectively) and using OHVs (8% and 12% respectively).

Rio Cebolla



Rio Guadalupe



Rio de las Vacas

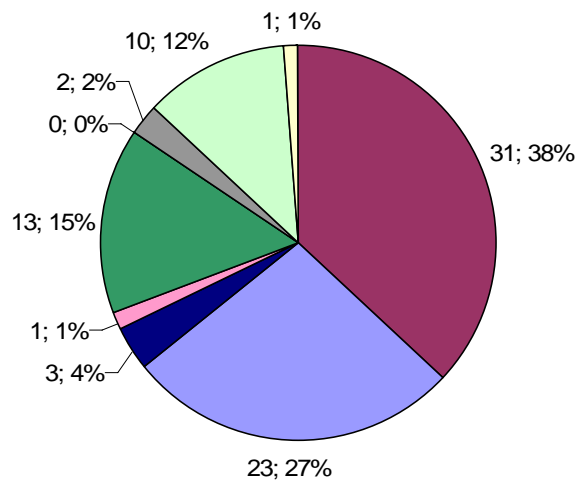


Figure 10. Percentage of each activity type occurring within each river system.

Off-road vehicle use is a popular activity within the Guadalupe Watershed. OHV activity causes high impacts to river systems and creates the greatest conflicts between campers. When surveyors contacted a group, they noted the existence of either ATVs (3- or 4-wheeler), dirt

bikes (did not include motorcycles not intended for off-road use), bicycles, or others (dune buggies, go-carts) (see Table 6). The 2004 social survey data was not broken down to include off-road vehicles such as jeeps, SUVs, or trucks. Rio Cebolla showed the greatest number of ATV, bicycle, and dirt bike usage compared to the other two river systems (note: data skewed by more contact with Cebolla campers).

Table 6. Actual numbers of off-road equipment within each river system.

Stream Corridor	ATVs	Dirtbikes	Bicycles	Others*	Total
Rio Cebolla	84	69	54	4	211
Rio Guadalupe	2	0	0	1	3
Rio de las Vacas	28	4	6	1	39
TOTAL	114	73	60	6	253

*Others include dune buggies and go-carts.

A total of 90 groups of the 383 groups contacted had at least one type of off-road equipment: ATVs, dirt bikes, bicycles, or others (see Figure 11). In many cases, groups had a variety of off-road equipment. When looking at percent of OHV groups within each corridor, Rio de las Vacas has the highest percentage (30%).

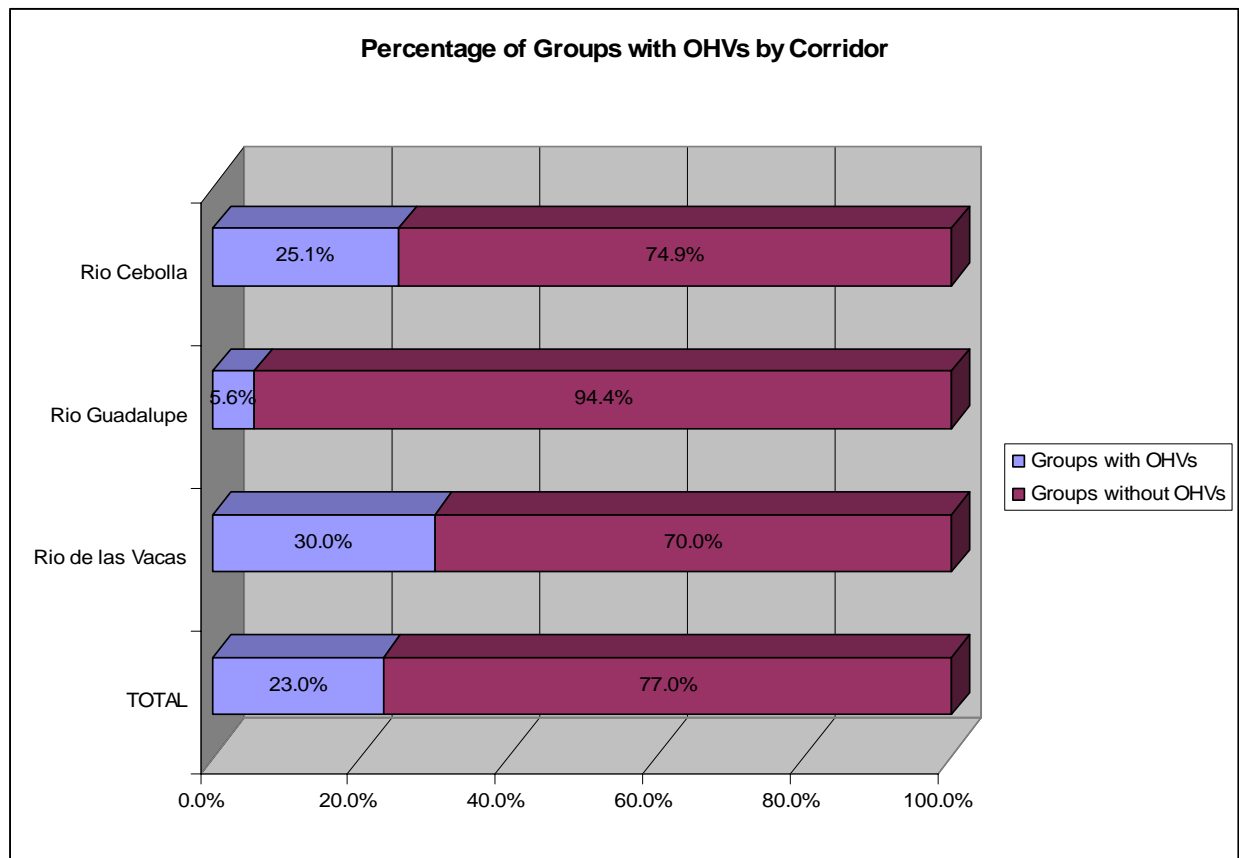


Figure 11. Percentage of groups with and without various off-road equipment in each river system.

Conflicts between those who use off-road vehicles and those who do not can be summed up through two quotations gleaned from social surveys: Those who use off-road vehicles were generally concerned about losing their right to use OHVs and those who deeply dislike off-road vehicles believed that ATVs need to be restricted. Table 7 contains various remarks made by forest visitors.

Table 7. Camper remarks regarding OHV use within the Guadalupe Watershed.

<u>2004 OHV Remarks</u>			
Stream Corridor	Complex Name	# People	Other Remarks
Cebolla	The Dumbell	4	They asked about future quad restrictions, they want a trail system; against fees
Cebolla	The Stairs	1	Compared to 20 years ago, 3 X as many ATVs, the area has changed a lot.
Cebolla	Eroded Vista	12	They want no OHV on forest
Cebolla	Party Place	2	You gotta do what you have to do to protect the forest, the ATVs really tear up the forest area.
Cebolla	Mixed Conifer	8	Education is crucial but it needs to be fair. The loggers, Ranchers, hikers and ATVs are all part of a package, when you restrict access to one, the forest falls apart, the forests are dying. Management is the key, not environmentalism.
Cebolla	Ponderosa Cluster	6	Wants ATV restrictions.
Guadalupe	Deer Creek Landing	7	Keep ATVs out of water
Las Vacas	Vacas U	9	ATVs need to stay in the city
Las Vacas	Beaver Dam	2	Enjoys area for ORV.
Las Vacas	Road 20 L	20	Want ATVs to slow down.
Las Vacas	Vacas View	2	ATV problems - broke weld to access; thought FR 539 was superhighway

Visitor Perception of Respect the Rio Program

Respect the Rio began in 2001; however, public education about the program did not come into full swing until a couple years later. The Contact Ranger program started in 2003, and the promotion of the Respect the Rio program geared up in 2004. Respect the Rio signage within the Guadalupe Watershed increased during the summer of 2004. Signs were added to many of the dispersed campsites to educate Forest visitors about topics such as not driving through streams, outdoor bathroom etiquette, and wetland restoration projects. In all, 17 different signs were used throughout the Guadalupe Watershed (see Appendix E).

As expected, only a small percentage (8.4%, 32 groups) of the 383 groups within the watershed had heard of Respect the Rio (see Figure 12). Rio Guadalupe had the highest percentage, 13.0% (7 out of 54 groups), of groups familiar with Respect the Rio. This could be due to the large number of signs in that corridor. Rio Cebolla had the lowest percentage, 7.2% (20 out of 279 groups), and Rio de las Vacas had 8.0% (4 out of 50 groups).

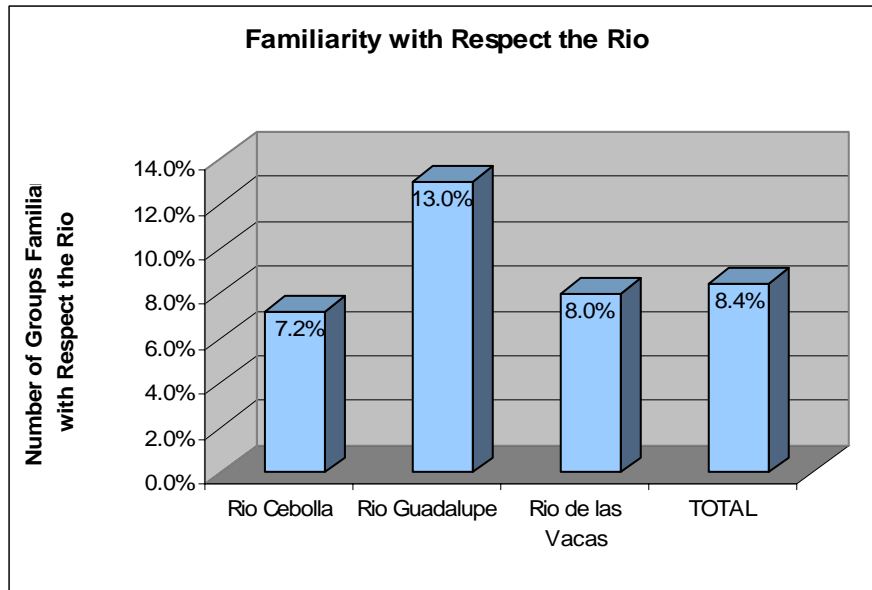


Figure 12 . Percentage of groups within a corridor that have heard of Respect the Rio.

As the summer progressed and more signs were installed, the chances of people becoming familiar with Respect the Rio increased. Familiar groups said they learned about Respect the Rio through prior discussions with Contact Rangers, by reading the signs, and from an article printed in the *Albuquerque Journal* during late spring 2004 (see Appendix F, Figure F1). Future years of the Contact Ranger program should show increases in the percentage of groups familiar with Respect the Rio.

When the Contact Rangers talked to each group, they explained the goals of the Respect the Rio program and explained what changes (i.e. vehicle closures, dispersed campsite modifications, and wetland restorations) were planned for the Guadalupe Watershed. Figure 13 shows the attitudes each group the Contact Rangers talked with had regarding the Respect the Rio program. Table 8 shows the actual number of individuals that comprised the groups in Figure 13. It was not always clear if the groups were opposed to the program or just opposed to the changes. What was clear was the majority (82.9%) of support or indifference for the program and the general lack of non-support (5.3%).

Table 8. Actual numbers of individual associated with the group attitudes toward Respect the Rio.

Attitude	Rio Cebolla		Rio Guadalupe		Rio de las Vacas		TOTAL	
	People	%	People	%	People	%	People	%
Not Supportive	97	6.8%	0	0%	0	0%	97	5.3%
No Comment	167	11.7%	32	17.1%	15	7.4%	214	11.8%
Indifferent	458	32.2%	73	39.0%	99	48.8%	630	34.8%
Supportive	700	49.2%	82	43.9%	89	43.8%	871	48.1%
TOTAL	1422	---	187	---	203	---	1812	100%

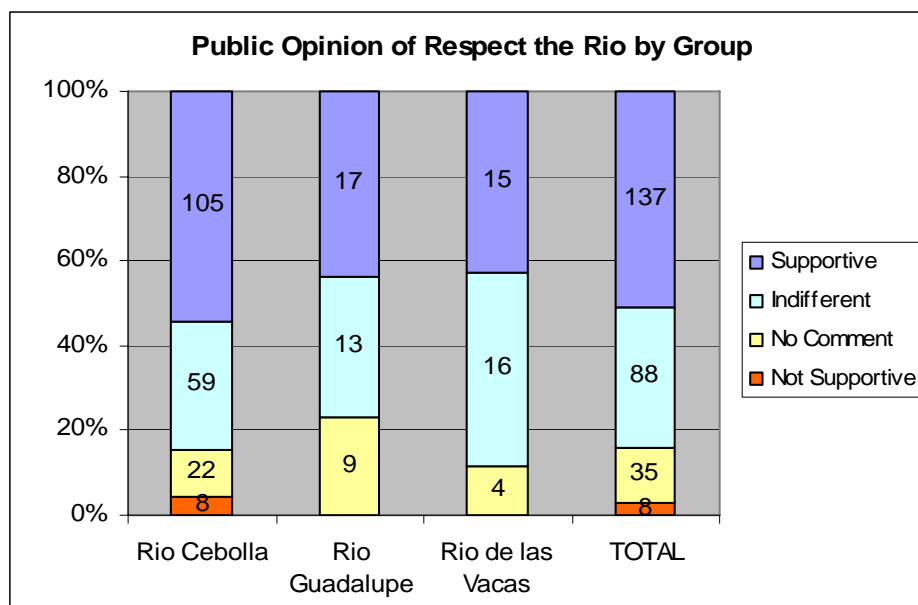


Figure 13. Group attitude toward the Respect the Rio program within each river system. The number of groups for each attitude is noted within each bar.

Dispersed Campsite Modifications

Dispersed campsite inventories conducted in 2003 documented watershed conditions and quantified resource damage related to dispersed recreation. In all, 84 dispersed camping complexes, comprised of 329 individual campsites, were found along Rio Guadalupe, Rio Cebolla, and Rio de las Vacas. Many of those sites were within 50 feet of the stream (see Photo 2). For more details about the 2003 inventories, please see the report entitled *Respect the Rio Annual Report 2003: Dispersed Recreation Component* (Santa Fe National Forest, November 2003).



Photo 2. A camper parked on Rio Cebolla's stream bank (17 July 2004).

Rio Guadalupe

Between fall 2003 and fall 2004, the Respect the Rio program focused on modifying several dispersed campsites within the Guadalupe Watershed. The Rio Guadalupe corridor was the first to see changes thanks to the Motorized Vehicle Use Closure (see Appendix C). A total of 1,438 feet of buck and pole fence, 222 boulders, and 29 berms were installed within the Rio Guadalupe corridor. In addition, 36 signs were put up in conjunction with the modifications. The signs ranged from official Forest Service closure signs to Respect the Rio interpretive signs.



Photo 3. Day Use Only sign located in parking area at Deer Creek Landing. Note the placed boulders and materials for a buck and pole fence (17 July 2004).

Deer Creek Landing is a popular spot for visitors, primarily day users, to stop and enjoy the refreshing swimming hole. Due to the popularity of the swimming hole, the Jemez Ranger District decided to create a small parking area and designate the area as “Day Use Only” to discourage overnight camping (see Photo 3). In fall 2003, the area accessible by vehicles was reduced significantly through strategic placement of large boulders and buck and pole fencing.

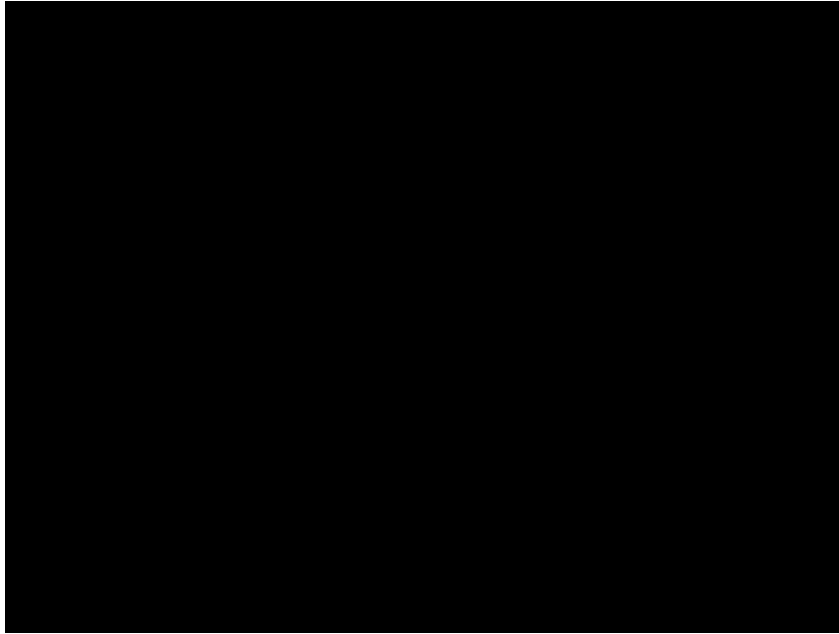


Photo 4. A berm enclosure prohibiting vehicle access to a dispersed campsite (17 July 2004).

In addition to putting in boulders and fencing, heavy machinery was used to scarify the old user-created roads and campsites. Scarification was necessary to loosen up the soil to allow plants to grow. Native grass seed was scattered over the area. Future improvements may consist of a developed trail that leads down to the swimming hole.

Other campsites along Rio Guadalupe were also modified. Most of the access roads to the campsites were blocked off at the road, per Motorized Vehicle Use

Closure. This was accomplished through placement of large boulders, buck and pole fence construction, and berms (see Photo 4). A metal gate was also constructed to give permittees access to the corral on Rio Guadalupe while deterring public vehicle access.

In suitable locations, pull outs or parking areas (typically room for one to three vehicles) were created to let visitors have access to the campsites. A key point to remember is that the Motorized Vehicle Use Closure restricts vehicles not people. Visitors are allowed to camp in the areas if they walk or hike in their tents and camping gear (see Photo 5). Anglers and hikers also use these pull outs and parking areas.

Access to the Butterfly Springs road was located just north of Porter Landing off of Forest Road 376. This road allowed visitors to camp on the east side of Rio Guadalupe; the side not covered by the road to river vehicle closure. A metal gate (see Photo 6) was installed to restrict public vehicle access, yet still let Forest Service personnel have access to that road for administrative use and fire control.



Photo 5. A forest visitor parked in a pull out and their camping gear that had been carried behind the fence via a walk-through (17 July 2004).



Photo 6. Metal gate restricting vehicle access to east side of Rio Guadalupe (17 July 2004).

Holiday Mesa road off of Forest Road 376 is still open, creating a management challenge. This road fords the Rio Guadalupe to allow access to the mesas on the east side of the stream. This road may be re-evaluated in the future. If the road is still needed for administrative use, then a gate restricting public access is needed to reduce the number of vehicles crossing the stream. If the road is not needed for administrative use then the road should be decommissioned, and the stream crossing should be restored to reflect more natural stream habitat conditions.

that can arise. This photo was taken in spring 2004 during high flows. The photo also shows how vehicle traffic has widened Rio Guadalupe.

Photo 7 shows the extent of the management and human safety problems

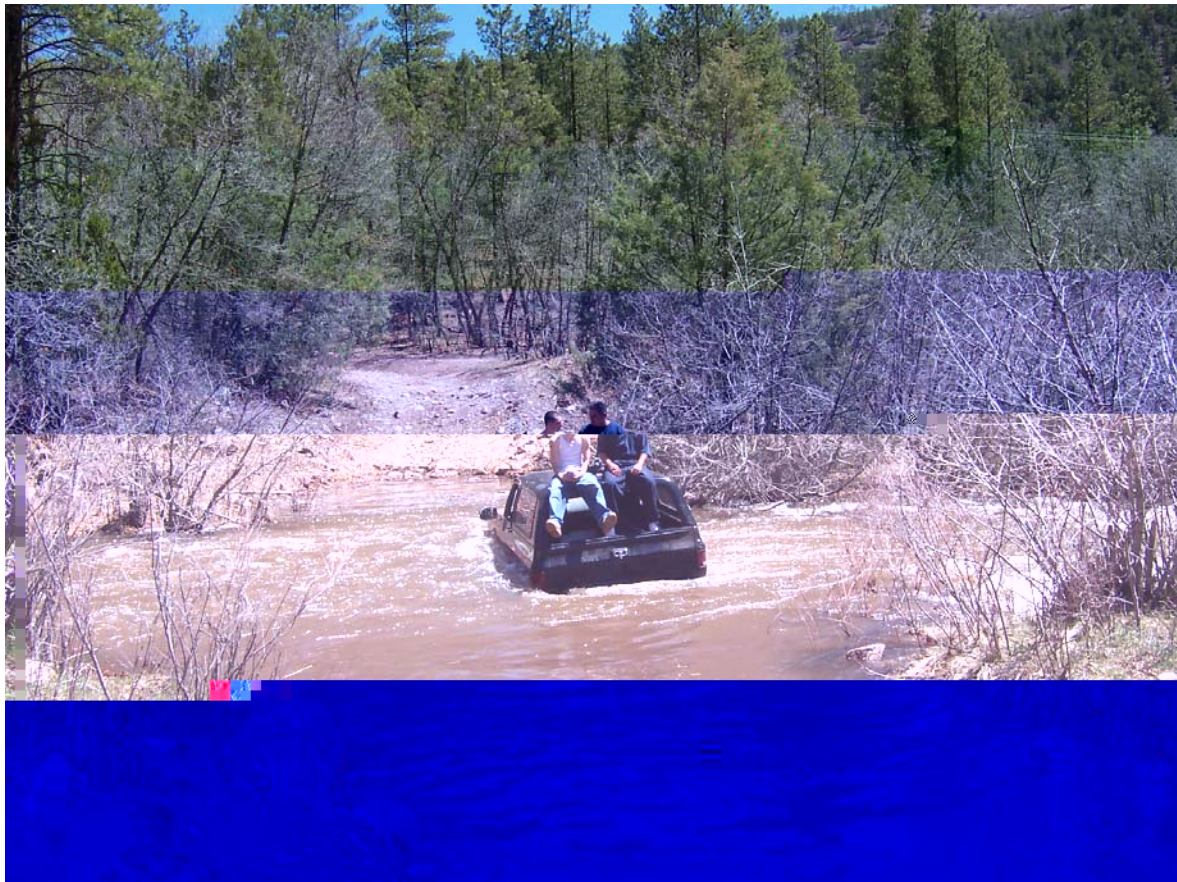


Photo 7. Two forest visitors attempt to cross Rio Guadalupe to access the Holiday Mesa road (20 April 2004).

Rio de las Vacas

Summer 2004 was also a time of change for Rio de las Vacas. While there was no official closure signed for this corridor, the Cuba Ranger District decided to modify several dispersed campsites. Many of these campsites had access roads that ford the stream in multiple locations (see Photo 8). A total of 4,693 feet of buck and pole fence and 17 boulders were installed within the Rio de las Vacas corridor. In addition, 12 Respect the Rio signs were put up in conjunction with the modifications.



Photo 8. Early summer 2004 photo of one of the Rio de las Vacas fords that was later restricted with buck and pole fencing (18 June 2004).

In addition to the dispersed campsite modifications, the lower two miles of Rio de las Vacas received a face lift. During a major stream restoration project, 225 logs, 30 root wads and over 50 boulders were placed in and along the stream to provide shade and habitat for fish and insects. Twenty pools were deepened, enhancing areas that were already started, but needed a little boost. To narrow and deepen the stream, two of the three river crossings were removed by bringing the banks closer together. The remaining ford, which was in better shape, was left open to allow the electric company access to their power lines. Two miles of road were closed to vehicle access.

Rio Cebolla

While there was no official closure for Rio Cebolla, work began in fall 2003 to target several problem areas. As of February 16, 2005, an official closure order (similar to the Rio Guadalupe Motorized Vehicle Use Closure) for the lower Rio Cebolla was signed by Forest Supervisor Gilbert Zepeda. A total of 10,986 feet of buck and pole fence, 44 boulders, 22 berms, and 10 tank traps were installed within the Rio Cebolla corridor. In addition, 23 signs were put up in conjunction with the modifications.

In fall 2003, Jemez Ranger District dealt with a problem ATV area to the west of Forest Road 376 and Rio Cebolla. This area was heavily used by ATVs (see Photo 9). Buck and pole fencing and berms were installed to deter ATV use (see Photo 10). Photo 10 still shows resource damage on the hill; however, the foreground shows an increase in vegetation.



Photo 9. Photo of ATV Hill taken during the 2003 dispersed campsite inventories (8 August 2003).

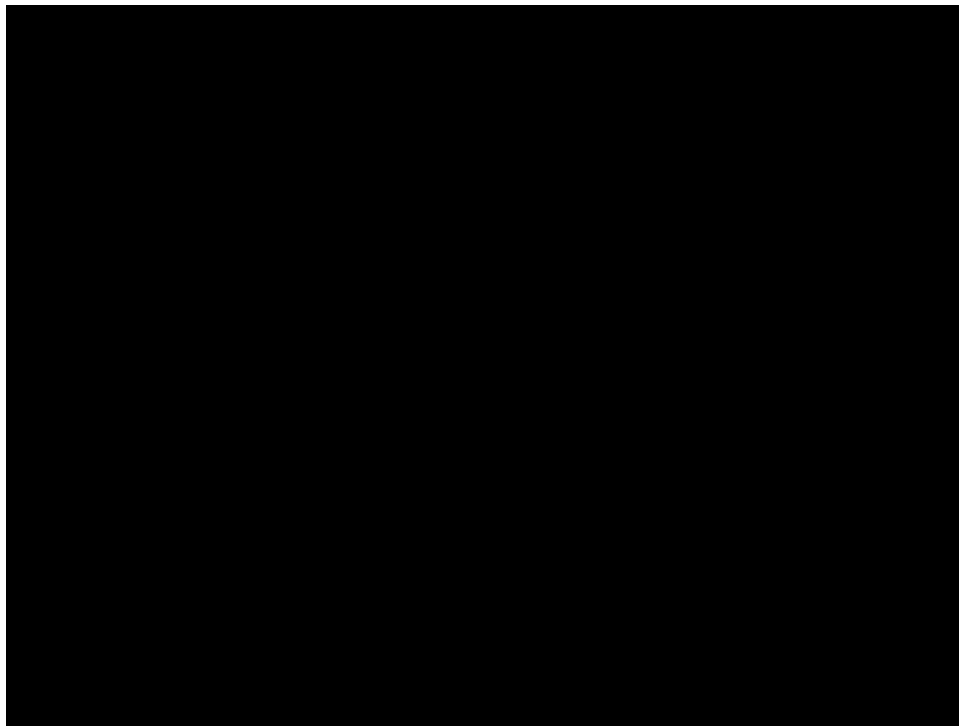


Photo 10. ATV Hill in summer 2004 after fencing and berms had been installed in fall 2003. Note grass production in foreground (17 July 2004).

In fall 2003, a series of springs, located west of Rio Cebolla, were reconnected to their original wetland. The springs were cut off from their wet meadow when Forest Road 376 was built several decades ago. The springs were reconnected through the installation of three French drains that allow the springs to flow under the road and replenish the wet meadow. During summer and fall of 2004, buck and pole fencing was installed to restrict cattle and vehicles from entering the 3-acre wet meadow while it is restoring itself (see Photo 11). The fencing encircles the wet meadow and a section of Rio Cebolla. There are two dispersed campsites at either end of the meadow exclosure, and the fencing ensures vehicles do not enter the area.



Photo 11. Forest Service employees, C. Dentino and T. Witt, build a buck and pole fence enclosure surrounding the wet meadow restoration area. Note that the fence continues on the far side along the tree line (18 October 2004).

In fall 2003, several projects improved water flow in the Rio Cebolla corridor. Two 3-foot culverts were replaced with 16-foot bottomless arches at the two junctions of Forest Road 376 and Rio Cebolla. These arches allow for a more natural water flow and accommodate high spring flows. A large French drain was installed under a user-created road that leads to a large, popular dispersed camping complex (Cebollita Springs East). While the user-created road did not cut off natural water flow, it did create problems with camping traffic. Numerous vehicles and camping trailers would become stuck in the wet soil causing tremendous resource damage. The French drain provides a dry access road to channel traffic across the wet meadow.

Cebollita Springs East is a long string of campsites along the Rio Cebolla. Many of the campsites pose minor, if any, threats to Rio Cebolla. However, there were some campsites closer to Rio Cebolla that posed major problems. Those campsites were restricted from vehicle access with a buck and pole fence built in mid-summer 2004.

The buck and pole fence that was built in 2003 to protect the meadow at Fogon Canyon was extended in 2004 to keep vehicles from damaging the area. Despite the previous fencing, vehicles were still driving onto the meadow and causing resource damage.

In fall 2004, work began to modify six of the 30 dispersed camping complexes along Rio Cebolla. These modifications will be in conjunction with the recently signed Rio Cebolla Motorized Vehicle Use Closure. Heavy machinery was used to rip up old user-created roads and campsites (see Photo 12). Areas were reseeded with native grasses (see Photos 13 and 14). Buck and pole fencing, boulder placement, and tank traps were also used to deflect vehicle traffic.



Photo 12. An excavator rips up an old user-created road (8 November 2004).



Photo 13. A dispersed campsite before modification (8 November 2004).



Photo 14. A dispersed campsite after being scarified and reseeded (9 November 2004).

Reactions to Dispersed Campsite Modifications

Motorized Vehicle Use Closure

Of the 383 groups contacted during summer 2004, there were 32 groups (235 people) that mentioned oppositions to or concerns about the motorized vehicle use closure (Guadalupe closure and future Cebolla closure) at some point during their conversations with Contact Rangers. Comments were divided into 12 categories. Table 9 shows the categorical breakdown of comments expressed by only 5.3% of the people contacted in 2004.

Table 9. Breakdown of oppositions and concerns in regards to the motorized vehicle use closure. The river corridor and number of people in the group are shown in parentheses. *Denotes the group had more than one opposition or concern.

Would Like Areas to Replace Closed Ones (6 groups totaling 65 people)

- Need to make areas on other side of road (Cebolla=9*)
- Would like to leave areas for RV camping (Cebolla=17)
- Flatten out some areas for RVs (Cebolla=5)
- Would like Forest Service to compensate closed areas by opening up other areas (Cebolla=30*)
- If there were spots cleared on the other side of the road, people would use them (Cebolla=2)
- He thinks there needs to be an alternative place to camp (Vacas=2)

Fairness (6 groups totaling 52 people)

- Didn't like areas being closed off because of people messing it up in general (Cebolla=1)
- Education is crucial but it needs to be fair. The loggers, Ranchers, hikers and ATVs are all part of a package, when you restrict access to one, the forest falls apart, the forests are dying. Management is the key, not environmentalism. (Cebolla=8)
- They said it's too bad we all have to suffer from the closures (Cebolla=5)
- People need to take responsibility for the area (Cebolla=4)
- People aren't really the problem, the water is dirty because of the ash from the fires. (Cebolla=3*)
- It's a shame that the good people have to pay for what the bad people do (Vacas=4)

Would Like Pullouts for RVs (5 groups totaling 70 people)

- Supportive of the idea but wants to make sure there are pullouts (Cebolla=4)
- If you fix up pull offs nice for RVs then it would be good (Cebolla=4)
- Don't mind the fence as long as they can get a pop-up by it. (Cebolla=12)
- Make sure there are spots for RVs (Cebolla=20)
- If we do buck & pole to leave enough spaces to park an RV so it is at least 10 ft or more from the edge of the road (Cebolla=30*)

Against Closures (4 groups totaling 31 people)

- People did not seem receptive to Cebolla being closed next year (Cebolla=2)
- It's too bad they're closing the area; they should have more signs (Cebolla=25)
- Upset about closure (Vacas=3)
- Don't close the road to San Antonio! Don't completely close area; keep some primitive camping available, to try and restore. (Guadalupe=1)

Want Vehicle Access to River (3 groups totaling 17 people)

- The point of camping is to camp by the river (Cebolla=4)
- Wanted to be able to have RV's still close to the river (Cebolla=12)
- Didn't like not being able to drive to river (Guadalupe=1)

Problems with Toilets Close to River (2 groups totaling 35 people)

- Well, they (campers) are going to piss in the river anyway (Cebolla=30)
- It's like one giant toilet. It's like a rock concert without port-a-potties. (Cebolla=5)

RV/Trailer Camping vs. Tent Camping (2 groups totaling 10 people)

- They said that people with trailers have their own bathrooms, they aren't as big of a problem as (tent) campers (Cebolla=8)
- Wife receptive but husband angry; he doesn't want closure, tent campers make a bigger mess with toilet paper; trailers are contained (Cebolla=2)

Want to Know if Closed Areas Will Reopen in Future (2 groups totaling 7 people)

- Wanted to know how long it would be closed. (Vacas=3)
- Wanted to know if we would open the sites once they were restored (Guadalupe=4)

Against Buck and Pole Fence (2 groups totaling 5 people)

- Supported education, but not really the fences (Cebolla=3*)
- They were against the fencing (Vacas=2)

Public Input Is Needed Before Making Closures (1 group totaling 9 people)

- Need public input on closures, should announce public hearing (Cebolla=9*)

Against How Public Lands Are Managed by Government (1 group totaling 2 people)

- very angry with Forest Service & possible fee area- thinks fees will only support hiring new personnel & not make anything better (Cebolla=2)

Access Issues Regarding Fencing (1 group totaling 1 person)

- Put in stiles or gates (Guadalupe=1)
-

Throughout the summer, signs of oppositions to the closure were obvious. Photo 15 shows a truck backed into dense vegetation. That particular campsite (Porter) is part of the Guadalupe vehicle exclosure. For the truck to be parked in the location shown in photo 15, the driver had to drive past a “Closed to All Motor Vehicles” sign and had to navigate berms and boulders used to block the access road. The fact that the owner tried to “hide” the truck, implies the owner knew what he did was wrong. The owner of the truck did move the vehicle when the Contact Rangers explained that this area was restricted to vehicles and that he could still camp there, all he had to do was move his vehicle to the pullout, which was 500 feet from the campsite, along the road above the campsite.

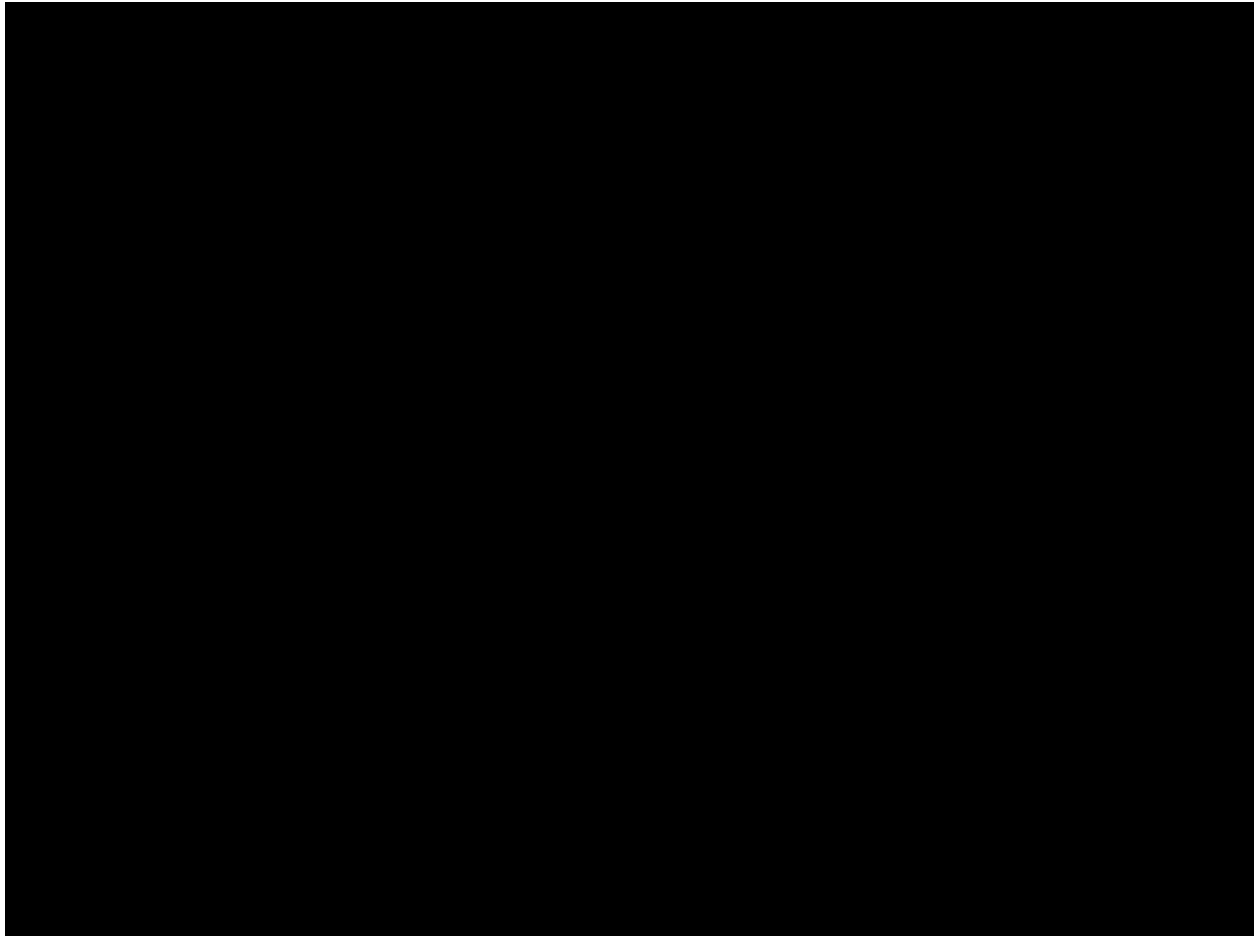


Photo 15. A truck "hiding" in dense vegetation in an area that is closed to motor vehicles (15 August 2004).

It will take time and persistent education by Contact Rangers to change public sentiment about the closures. In the meantime, beefing up law enforcement efforts within the area will help to reach those where educational efforts have failed. To reach Hispanic visitors, the “Be a River-Friendly Camper” flier has been translated into Spanish (see Appendix B, Figure B2) and will be printed on the reverse side of the English version.

Buck and Pole Fence

Buck and pole fencing seems to be the best method available to deter vehicles from degrading stream banks and wetlands. Though fence construction is very costly, it leaves less of a long-term impact on the land.

One of the concerns about the fence is that it does not provide an opportunity to park vehicles off of Forest Road 376. To mitigate for this concern, blockades and fence construction included numerous parking spaces to accommodate vehicles of all sizes in places off the road and yet out of the riparian area. At these parking areas, walk-through gaps (see Photo 16) in the fence were constructed to make walk-in access easier – wide enough to walk through but not wide enough for ATVs.

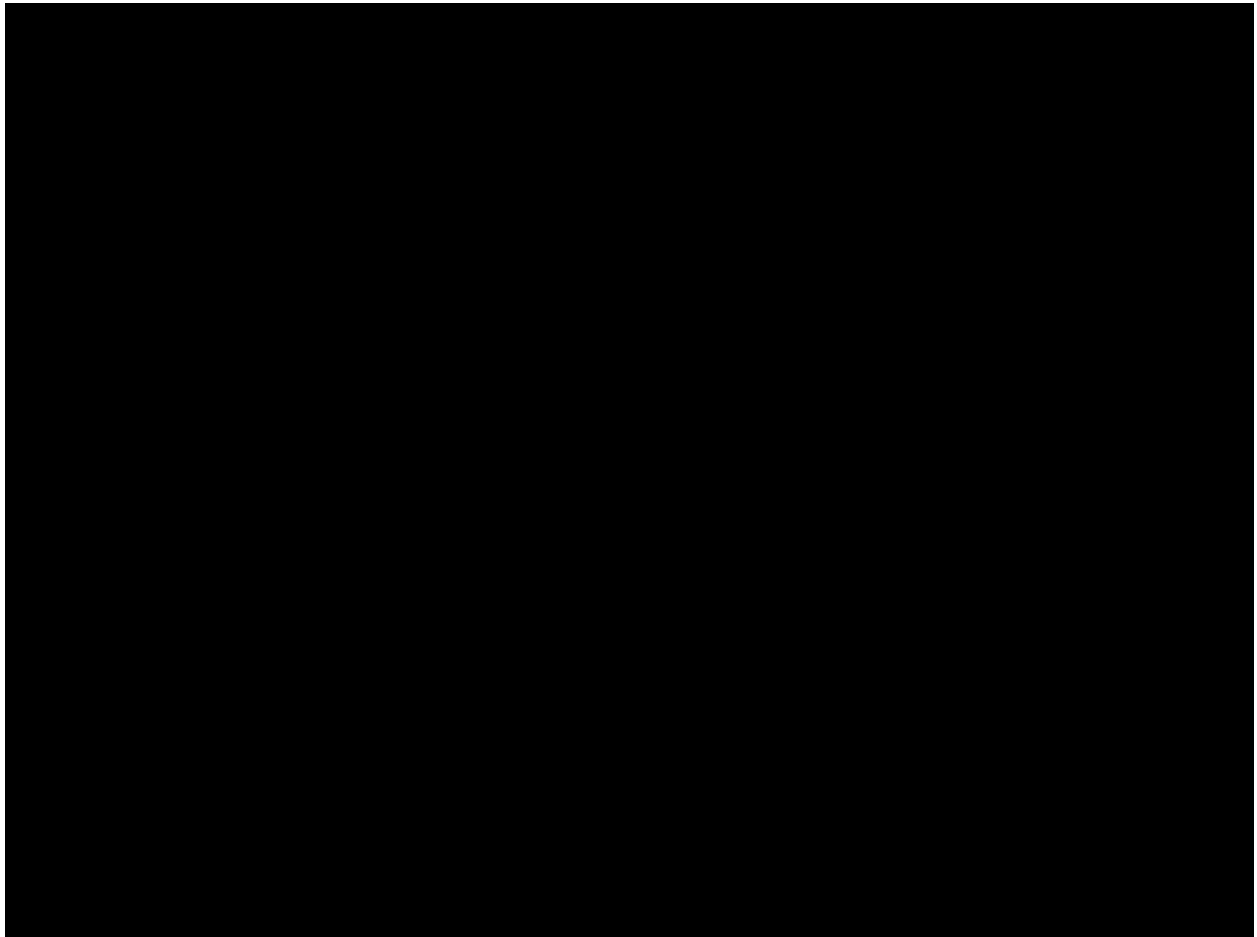


Photo 16. An example of a walk-through opening in the buck and pole fence (17 July 2004).

In monitoring fence that was already in place, we found that unanchored ends could be moved. In fact, some moved the fence to drive their vehicle through and then closed the fence behind them. One step to make this task harder for people that are determined to drive everywhere is to drive posts (see Photo 16) at the end of the fence and at walk-through points.

Another problem encountered, especially in the Rio de las Vacas corridor, was vehicles driving around the ends of the buck and pole fence. Many of the fence ends were not tied into natural landscape barriers such as trees, boulders, or drop-offs. For the fences to restrict vehicle access to the streams, the fences need to be extended and tied into a natural barrier.

One of the most disheartening problems encountered was the blatant destruction of the buck and pole fence. As shown in Photo 17, someone had cut and removed a section of the fence so he/she could drive his/her vehicle down the closed access road, past a “Closed to All Motor Vehicles” sign. To deter this from continuing, access roads that have been closed need to be scarified and revegetated. As the vegetation reclaims the road, visitors will “forget” there was ever a road there.

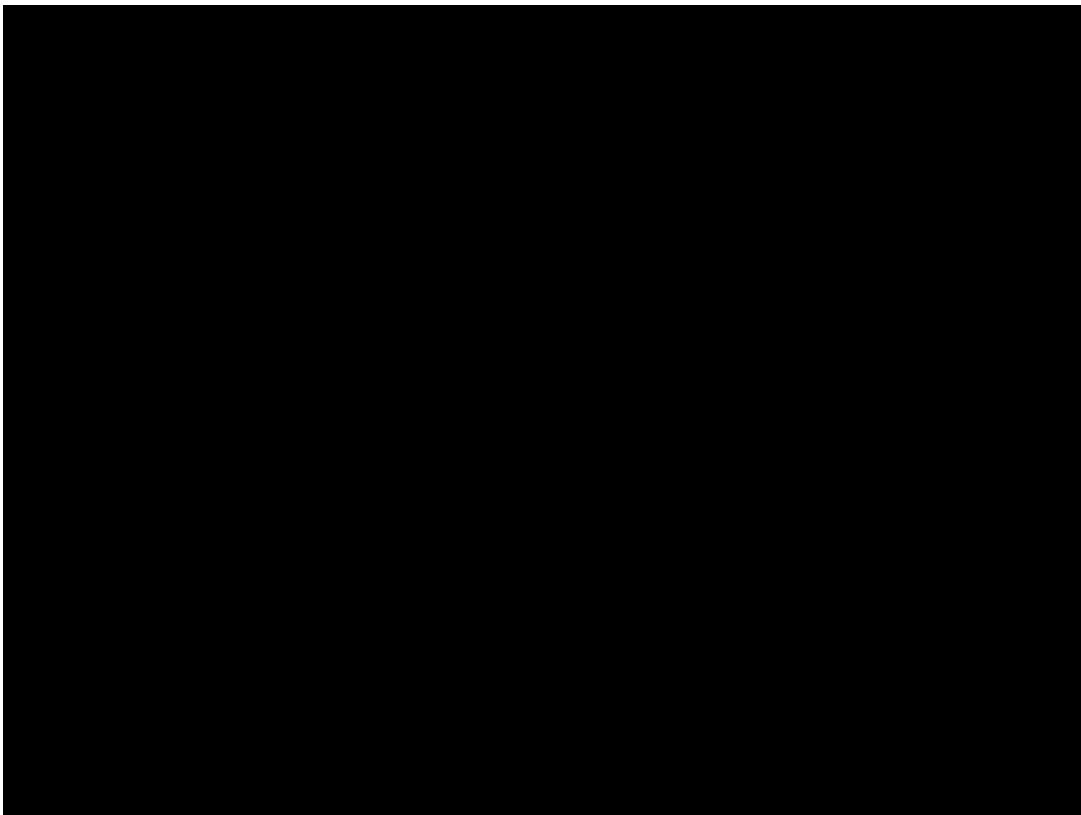


Photo 17. A section of buck and pole fence was cut and removed by a Forest visitor to gain vehicle access to an area that was closed to motorized vehicles (17 July 2004).

Sometimes the buck and pole fences were destroyed by Forest residents. We have a good bit of beaver activity along Rio Cebolla. While we want beavers in the area, they became a nuisance when they eat the aspen poles used as rails in the fence (see Photo 18). Using pine rails instead of aspen in areas containing beavers will cut down on maintenance.

Another part-time Forest resident (cattle) created problems with a buck and pole fence meant to protect a restored wet meadow. Soon after the fence had been constructed, cows had moved into the enclosure (see Photo 19). It was determined that all fence used to restrict cattle needed to be at least 46 inches high. The enclosure also needs to include a gate to easily remove stray cattle and allow for ease of pushing cattle through when they are brought on and taken off.



Photo 18. Evidence of buck and pole fence destroyed by a beaver (4 November 2004).



Photo 19. Cattle seen inside of the wet meadow enclosure (4 November 2004).

Berms

Berms are mounds of dirt strategically placed to deter motor vehicle access. For the most part, the berms are successful. Many motorists realize that if they tried to drive over the berm their vehicle would end up high-centered on top of the berm. In addition to berms blocking old user created access roads, signs indicating the area is closed to all motor vehicles are placed behind the berm in the middle of the old road.

However, Contact Rangers saw a few instances where the berms were breached. This could have been from poor berm construction. ATVs were the most common vehicle to breach the berms. The shorter wheel base makes driving over the berm easy and in some cases fun. In areas where ATV use is a problem, berms can be coupled with boulders to prevent ATV passage.



Photo 20. Example of a "Walk-in Camping Permitted" sign located at a walk-through opening in the buck and pole fence (17 July 2004).

Signage

Respect the Rio signs as well as the regulation Forest Service signs (for example, the brown and white "Closed to All Motor Vehicles") were used within the Guadalupe Watershed to notify or educate forest visitors about the changes and vehicle closures. Since many of the campers return to the same site year after year, the Respect the Rio signs were designed to be easily interchangeable which allows a different message to be seen. Several campers mentioned they enjoyed the Respect the Rio signs (see Photo 20) so much that as they were walking they stopped to read the different signs.

Unfortunately, the signs were not always well received. Several signs (laminated portion) had been removed. In some cases, the entire sign, placard, and post were removed. One such removed sign was found burnt in a campfire.

Off-road Vehicle Use

The need for motor vehicle exclosures and public education is verified by some of the situations forest visitors get themselves into. For example, many forest visitors often mistake a wet meadow for a grassland. The result is often habitat damage, but can also include stuck vehicles (see Photo 21).



Photo 21. A truck trying to drive closer to Rio Cebolla stuck in a wet meadow (26 October 2004).

Trash

The most common problem seen in the watershed is trash left by forest visitors (see Photos 22 a-d).

Whenever Contact Rangers remind campers to pack out their trash, the typical reply is “We always take out more than we bring in.”

While this may be the case in some instances, it is not always. We spoke to a group of men out for the day, and they gave us the typical reply. However, when we drove by the same site at the end of the day, trash was left behind.

Oftentimes, the campers will bag up their trash and leave it in the campsite or by the road for someone else to pick up. The trash bags are usually shredded by animals, and trash scattered everywhere before Forest Service personnel find them. Contact Rangers try to remind campers that part of the reason dispersed camping is free is because campers are expected to leave the area in the same shape or better than when they arrived. The Forest Service does not collect trash in dispersed camping areas.

Tree Damage

Human caused damage to trees was seen in a variety of forms. Even though there are Forest regulations against cutting live trees, parts or entire trees were damaged by campers looking for firewood to fuel their campfires. Trees were also damaged or cut to gain access for RVs or campers. It was amazing to see many campers and RVs that were parked in tight quarters. Another growing disturbance is the “tagging” of trees. Graffiti can be seen at three campsites (Double Horseshoe, Party Place, Cebolla Arc).

Toilets

Some of the most disturbing sights during the Contact Ranger program were the discovery of abandoned, make-shift toilets. While some forest visitors did create pits (as seen in Photo 23a), it was obvious they never removed the toilet nor filled in the pit. This not only creates a health hazard for humans, but also ruins the beauty of the site for the next camper.



Photos 22 a-d. Various photos of trash left by campers (a-18 June 2004, b-15 August 2004, c-18 June 2004, d-8 September 2004).



Photo 23 a/b. Examples of make-shift toilets left behind by campers (a-15 August 2004, b-18 June 2004).

Education Accomplishments and Recommendations

Contact Ranger Program

Students from the Student Conservation Association program were an excellent choice and did a great job. This organization should be tapped again for crew members with some added emphasis placed on local university recruitment as well. Volunteers from the Girl Scout Camp could also be utilized.

Interpretive Programs

Interpretive programs were delivered during the summer of 2004 at the Jemez Falls Campground Amphitheater only due to handicapped accessibility issues. Visitors raved, as did campground hosts, as many area users learned how they could help our rivers stay healthy. In 2005, the modified Redondo Campground will be used as well. It would also be good to explore extending the reach of the interpretive programs to Cuba Ranger District at the newly renovated Rio las Vacas and Clear Creek campgrounds. It should be noted here that the interpretive programming would not have been a success without the very generous support of Santa Fe National Forest's Heritage Program, which supplied wonderful guest speakers.

A total of 475 people attended the 16 interpretive programs. Attendance averaged about 29 visitors per talk with as few as 11 attending and as many as 59. Topics covered during the Respect the Rio's interpretive program included: beaver adaptations, archaeology of the Jemez Mountains, bats, Being Bear Aware, wildfires, bark beetles, and back country hiking.

Signage

Artist Deb Robasky designed 11 different backgrounds to be used. In all, 17 different messages were created (See Appendix E). The signs fall under administrative use and were color printed and laminated in house. The laminated signs were then stapled to a plywood placard. The placards were either attached directly to buck and pole fencing or to posts put into the ground at various dispersed campsites. The laminated signs are cheap to produce and can be replaced easily if damaged. The signs can be rotated to allow different messages to be seen at specific locations. More signs will be installed in 2005 to cover dispersed campsites that do not currently have signage. Future placards should be square to allow for changing vertical signs to horizontal signs and vice versa. Additional topics for future signs should include noxious weeds, toxins in campfires (Garbage in, Toxics out), New Mexico's state fish—Rio Grande Cutthroat Trout, sedimentation in streams from erosion, and higher temperature of streams due to de-vegetation.

Public Outreach

During 2004, the Respect the Rio message reached people through a variety of media:

- An article covering the upcoming modifications appeared in the *Albuquerque Journal*.
- A Respect the Rio: "Pack it in, pack it out" ad was shown in the Century Rio 24 Theaters (Albuquerque, NM) from December 2004 until March 2005 (see Appendix G). The ad was shown during a repeating slide show while movie patrons waited for the movie to begin.
- On December 17, 2004, the Respect the Rio and Respect the River website (www.fs.fed.us/rtr) became available to the public.

- Respect the Rio informational table tents were displayed in six Jemez Valley restaurants from mid-August to mid-September 2004.
- A native fish aquarium (180-gallon coldwater tank) and interpretive panels have been on display at the Walatowa Visitor Center since February 2004.
- The education program reached over 965 students and 541 adults (which includes 58 teachers). Schools included Colinas del Norte and Menaul schools in Albuquerque and Jemez Valley public schools. Students learned about native fish, bats, fire ecology, wilderness, water quality, healthy watersheds, and recreation. The education program also was a key collaborator at the Albuquerque Water Festival, Santa Fe Water Festival, Walatowa Earth Day, Chapparal Girl Scout Camp, and a Boy Scout Day Camp.
- The Rio Grande Cutthroat Trout Life Cycle game was available on CD earlier this spring. Since then we have mailed out over 70 copies of the CD to various teachers, educators, and trout enthusiasts. The game not only focuses on the life cycle of New Mexico's state fish, but it also allows players to explore various influences on water quality. Additional curriculum and a Spanish translation of the game board will be developed during 2005.
- The Santa Fe National Forest also was given the gift of hosting the Southwestern Region's stream simulator. The simulator offers children and adults the chance to see how rivers can be altered through environmental changes. Curriculum for the stream simulator will be developed during 2005.

Future outreach possibilities should include informational booths at local events (such as the Walatowa Red Rocks Art Show and Jemez Springs Fourth of July celebration) and at the New Mexico State Fair in Albuquerque. Respect the Rio information in the Vacation Guide to the Jemez Mountains. A Respect the Rio brochure could be developed. Involvement with the Jemez Watershed Group should continue.

Public outreach is still the most effective method of reaching forest visitors. Efforts will continue as long as the need is present.

Appendix A

Ecological Repercussions of Guadalupe Watershed Impairments

Temperature Impairment

Rio de las Vacas and Rio Cebolla are both impaired due to water temperature. New Mexico Environment Department, Surface Water Quality Bureau (NMED-SWQB) states that “temperature shall not exceed 20°C (68°F)” (NMED 2002) for an extended period of time (3-7 days). Coldwater salmonids, such as native Rio Grande cutthroat trout, and other river life need cold, well-oxygenated water to survive. If a river exceeds 20°C (68°F) for 3 days or more, oxygen decreases dramatically, and fish are in danger of dying. Temperature impairment is often linked to decreased amounts of vegetation, such as overhanging willow, grasses, and other trees, that naturally cools stream waters. In addition, temperature increases are associated with stream widening caused by slumping banks and vehicle crossings.

Total Organic Carbon (TOC) Impairment

Rio de las Vacas carries too large a Total Organic Carbon (TOC) load. TOC refers to total amount of suspended and dissolved organic matter found in a stream, including dead vegetation, animal (including human) detritus, and chemical compounds possibly introduced by humans in pesticides and fertilizers. Effects that TOC can have on the system include “decreased light penetration and depletion of oxygen” (NMED 2002). Decreased light penetration in the stream limits plant growth and depleted oxygen inhibits breathing for gilled-animals.

Stream Bottom Deposit Impairment

Rio Cebolla is affected by stream bottom deposit impairment, defined as “water contaminants from other than natural causes that will settle and damage or impair the normal growth, function, or reproduction of aquatic life or significantly alter the physical or chemical properties of the bottom” (NMED 2002). Fine silty sediments, in particular, that build up along a naturally gravelly stream bottom severely reduce available habitat for macroinvertebrate insects and fish during various life stages. Such deposits limit available spawning areas for fish and block gill surfaces of macroinvertebrates such as mayflies and stoneflies, lowering amount of oxygen insects can absorb and limiting their ability to see prey. Fine silt also limits light penetration to the stream bottom, affecting natural plant growth, and can change healthy hydrological movement of stream deposits in general. Roads, trails, and browned-out stream banks are often sources of fine sediment. Monsoon season often finds southwestern streams running reddish-brown with silty road and campsite runoff.

Metals Impairment

Rio Guadalupe has exceeded state standards for metals (chronic aluminum). NMED-SWQB has described this impairment as “indicative of a landscape source” (NMED 2002), meaning this chronic aluminum is likely a naturally occurring impairment not caused by human impacts. Volcanic rocks of Rio Guadalupe canyon contain over 14% aluminum oxide naturally, nearly twice the normal occurrence of aluminum in non-volcanic geological formations. While human activities probably are not causing chronic aluminum in Rio Guadalupe, NMED-SWQB needs to continue monitoring this impairment, which is toxic to fish, bottom-dwelling insects, and some plants.

Definitions

In order to easily describe what was learned by Respect the Rio staff this summer, some definitions of terms are necessary.

Dispersed Camping

Throughout National Forests all over the country, campers make their own primitive “dispersed” camping areas. “Dispersed” areas are not developed or heavily managed and do not have such facilities as toilets, picnic tables, water pumps, RV hookups, hosts, and pavement normally associated with a “campground.”

Dispersed Campsite

A dispersed “campsite” is a de-vegetated spot off an access road where a single family, or small group, will camp for the night. Usually, a dispersed “campsite” is marked by a fire ring, though heavily used sites may contain multiple fire rings. Dispersed campsites in close proximity may also be connected by a small, user-created road. Surveyors designated each campsite with its own inventory letter.

Dispersed Complex

A dispersed camping “complex” is a series of campsites accessed by the same access road(s) and connected by a system of social roads and/or wide trails. The term “complex” is used in this report to define distinct areas of dispersed camping, which usually consist of multiple campsites. In rare cases, a “complex” may also refer to a single dispersed campsite with a distinct location. Surveyors designated each complex with its own inventory number and name.

Appendix B

Figure B1. Be a River-Friendly Flier (English)



Be a River-Friendly Camper

People seek scenic, peaceful places like this to get away from the noise and stress of their everyday lives. Whether you're here for the day or here to camp, you can help keep campsites clean and safe for everyone, including the plants and animals that call this home. By following a few simple guidelines, you will help to keep this a great place to visit.

Respect the River

Restoration sites. If you come across a campsite that is blocked off with logs, boulders, do not try to remove these to access the area. Closures have been made to protect plants and habitats and to strengthen banks. Check with the local ranger station for information on closure location and read all posted signs.

Stay at least 100 feet from the stream in designated areas. Vehicles parked too close to a stream compact the soil, erode banks, ruining the stream and destroying aquatic habitat.

Respect an existing campsite. Don't disturb plants and flowers to create new campsites. Protect stream quality and aquatic habitat by keeping campsites 100 feet away from streams, lakes and wetlands.

Stay on established roads and trails. By staying on established areas and off-road travel, you protect plant life and animal habitat.

Don't burn. Carry all your garbage, food scraps and burning materials, including beverage containers. Aluminum cans and bottles don't burn, so pack them out.

You're a cat. If toilets are unavailable, dig a hole 8 inches deep, 200 feet or more away from streams and campsites. Deposit human waste and cover it with soil. Burn or pack out used toilet paper.

Dispose of RV and Camper/Trailer sewage and gray water properly. Utilize designated dump stations. It is illegal to dump waste water or gray water on the ground, in rented portable toilets, or in the stream.

Wash away from the water. Soap degrades water quality and harms fish and other aquatic life. Protect them by washing at least 200 feet from the water, using plain water or biodegradable soap.

Avoid spawning areas. The stream is home to a rare trout and several other types of fish. They build their nests, called redds, in the gravel in the shallow parts of streams. Young trout hide in the spaces between the gravel while they mature. Both the eggs and young fish are extremely fragile. You can help protect them by not walking on gravel, not building rock dams in the river, and not driving through streams.

Keep your fires small and bring your own firewood. Use existing stone fire rings. Gathering firewood, even downed wood, destroys stream habitat, especially in concentrated camping areas near water. Try gathering wood further from streams and lakes, or find other sources of wood, such as old slash piles or stores, or bring your own.

Observe fire restrictions. Please check at the local Ranger District for current fire restriction information.

Respect other campers. These are family camping areas for everyone; keep music and noise levels down.

Respect the land. Stay on a road or on a trail. Do not cross fences, and do not remove barriers or signs made to restrict access to stream banks. Read and follow updated information and posted signs.

Keep vehicles off stream water or wetlands. Do not drive on stream banks, soil, kill vegetation, and reduce scenic quality.

Choose a campsite. Avoid bushes, trees, and wetlands. Protect water quality. Campsites should be located on other wetlands.

Stay on a trail. Avoiding upland areas helps preserve riparian habitat.

Pack it out. Pack out all trash and pack out all containers. Pack them out.

Pretend you're a cat. Dig a hole 8 inches deep, 200 feet or more away from streams and campsites. Deposit human waste and cover it up with soil. Burn or pack out used toilet paper.


Santa Fe National Forest

U.S. Forest Service

Department of the Interior

If you would like more information about the Respect the Rio program, please call the Education Coordinator at 505-829-3535.

Figure B2. Be a River-Friendly Flier (Spanish)



Acampar como un Amigo del Río

Mucha gente busca un sitio sereno y pintoresco como este para escaparse del ruido y del estrés de la vida diaria. Ya sea para pasar el día o para acampar, usted puede ayudar a mantener limpios y seguros los sitios de camping para todos, incluyendo las plantas y los animales que viven aquí. Siguiendo unas reglas sencillas, usted ayudará a conservar este lugar como un gran sitio para visitar.

Respect the Río

Respete los sitios de restauración. Si encuentra un camino o un sitio de camping que está obstruido por troncos, cercas y pedruscos, no trate de mover las barreras o entrar en la área. Los cierres se han construido para restaurar las plantas y los hábitats y para reforzar las riberas de los ríos. Compruebe con el Distrito local para la información más reciente sobre los sitios cerrados y lea todos los letreros.

Mantenga sus vehículos por lo menos a 100 pies del agua o aparque en las áreas designadas. Los vehículos que se conducen y se aparcan demasiado cerca del río hacen el suelo compacto, matan las plantas y erosionan las riberas de los ríos, estropeando la calidad pintoresca y destruyendo el hábitat acuático.

Elija un sitio de camping que ya existe. No moleste ni los arbustos, los árboles ni las flores para crear nuevos sitios de camping. Proteja la calidad del agua y el hábitat acuático por manteniendo los sitios de camping por lo menos a 100 pies de los ríos, lagos y vegas húmedas.

Quédense en los caminos y los senderos establecidos. Evitando las áreas no utilizadas y no conduciendo fuera de los caminos, usted puede preservar las plantas y el hábitat de los animales.

Llévese su basura cuando salga. Lévese toda su basura, sobras de comida y materia de embalaje, incluyendo los envases de bebida. Las latas de aluminio y las botellas no se pueden quemar, así que debe usted llevárselas.

Actúe como un gato. Si no hay un cuarto de baño, haga un hoyo que sea 6-8 pulgadas hondo, a 200 pies o más del agua y de los sitios de camping. Después de usar el hoyo, cúbralo con la tierra. Queme o llévese el papel higiénico usado.

Deshágase apropiadamente de las aguas residuales de las caravanas. Utilice las estaciones designadas para las aguas residuales. Es ilegal depositar las aguas residuales en la tierra, los servicios portátiles o el río.


Lávese lejos del agua. El jabón degrada la calidad del agua y hace daño a los peces y los otros organismos acuáticos. Protéjalos lavándose por lo menos a 200 pies del agua, usando agua pura o jabón biodegradable.

Evite las áreas de desovar. El río es hogar de una trucha rara y muchos otros tipos de peces. Construyen sus nidos, llamados "redds" en inglés, en las gravillas de aguas pocas profundas del río. Las truchas jóvenes se esconden en los espacios entre las gravillas mientras maduran. Tanto los huevos como las jóvenes son muy frágiles. Usted puede ayudar a protegerlos no andando en las gravillas, no construyendo presas de piedras, y no conduciendo por los ríos.

Mantenga pequeños los fuegos y traiga su propia leña. Utilice los anillos de piedras que ya existen para el fuego. Coger leña, aún de los árboles caídos, destruye el hábitat, especialmente en las áreas de restauración de camping cerca del agua. Trate de coger leña más lejos de los ríos y lagos, encuentre otras áreas de leña como los montones de leña cortada, o traiga su propia leña.

Observe las restricciones sobre el fuego. Favor de comprobar con el Distrito local para la información más reciente sobre las restricciones de fuego.

Respete a otros campistas. Estos son sitios de camping para todos, incluyendo las familias; mantenga bajo el nivel de música y ruido.



Santa Fe National Forest

Para más información sobre Respect the Río, favor de llamar a la Coordinadora de Educación a (505) 829-3535, o visite la página web a <http://www.fs.fed.us/rtr>.

Table B2. Codes used for social survey data entry during summer 2004.

Date, Time & Site Letter Site Letter		MM/YY
		HHMM
		<i>Enter Letter</i>
Weather & Temp.	S	Sunny
	PC	Partly Cloudy
	C	Cloudy
	F	Fog
	R	Rain
	H	Hail
	W	Windy
	B	Breeze
		<i>Enter temp. in F°</i>
Site Occupied	Y	Yes
	N	No
Talked with People	Y	Yes
	N	No
Camping Type	T	Tent
	M	Motorhome
	CT	Camp Trailer
	PT	Pop-up Trailer
	PC	Pickup Camper
	Other	Other (describe)
	DAY	Day Use
Site Condition		Describe problems for poor condition
# Vehicles		<i>Enter Number</i>
# Quads ATVs		<i>Enter Number</i>
# Dirt Bikes		<i>Enter Number</i>
# Pedal Bikes		<i>Enter Number</i>
# Other		<i>Enter Number</i>
# People		<i>Enter Number</i>
Zip Code or City, State		<i>Enter Zip Code</i>
		OR <i>Enter City, State</i>
Duration		<i>Enter # of Nights</i>
		OR <i>Day (for day use)</i>
Visited Last Year	Y	Yes
	N	No
# Years in Area		<i>Enter # of years</i>
Activity	C	Camping
	F	Fishing
	B	Bicycling
	OHV	OHV Use
	SW	Swimming
	HK	Hiking
	HN	Hunting
	HS	Horseshoe Game
	P	Picnicking
	SOC	Social Event
Heard of RtR Attitude	Y	Yes
	N	No
	+	supports
	0	indifferent
	-	does not support
Other Remarks		<i>Enter Remarks or clarifications of above information</i>

Appendix C

ORDER
MOTORIZED VEHICLE USE CLOSURE
SANTA FE NATIONAL FOREST
RIO GUADALUPE AREA

Pursuant To 36 CFR Section 261.50 (a), the following act is prohibited on National Forest System Land in the area known as the Rio Guadalupe Motorized Vehicle Closure Area described in this order and shown in exhibit A, within the Santa Fe National Forest for resource protection until further notice.

These prohibitions are in addition to those enumerated in 36 CFR Section 261 subpart A:

- (1) It is prohibited to possess or use a motorized vehicle off Forest Road 376 between the road and the river in the Rio Guadalupe Motorized Vehicle Closure Area on National Forest System Land within the Santa Fe National Forest. Parking is permitted within 30 feet of the edge of the roadway on Forest Road 376 unless posted "No Parking". Other designated parking areas are exempt from the provisions of this order. [36 CFR 261.56]
- (2) It is prohibited to park in violation of posted instructions in the Rio Guadalupe Motorized Vehicle Closure Area. [36CFR 261.58 (g)]

Pursuant to 36 CFR 261.50 (e), the following persons are exempt from this order:

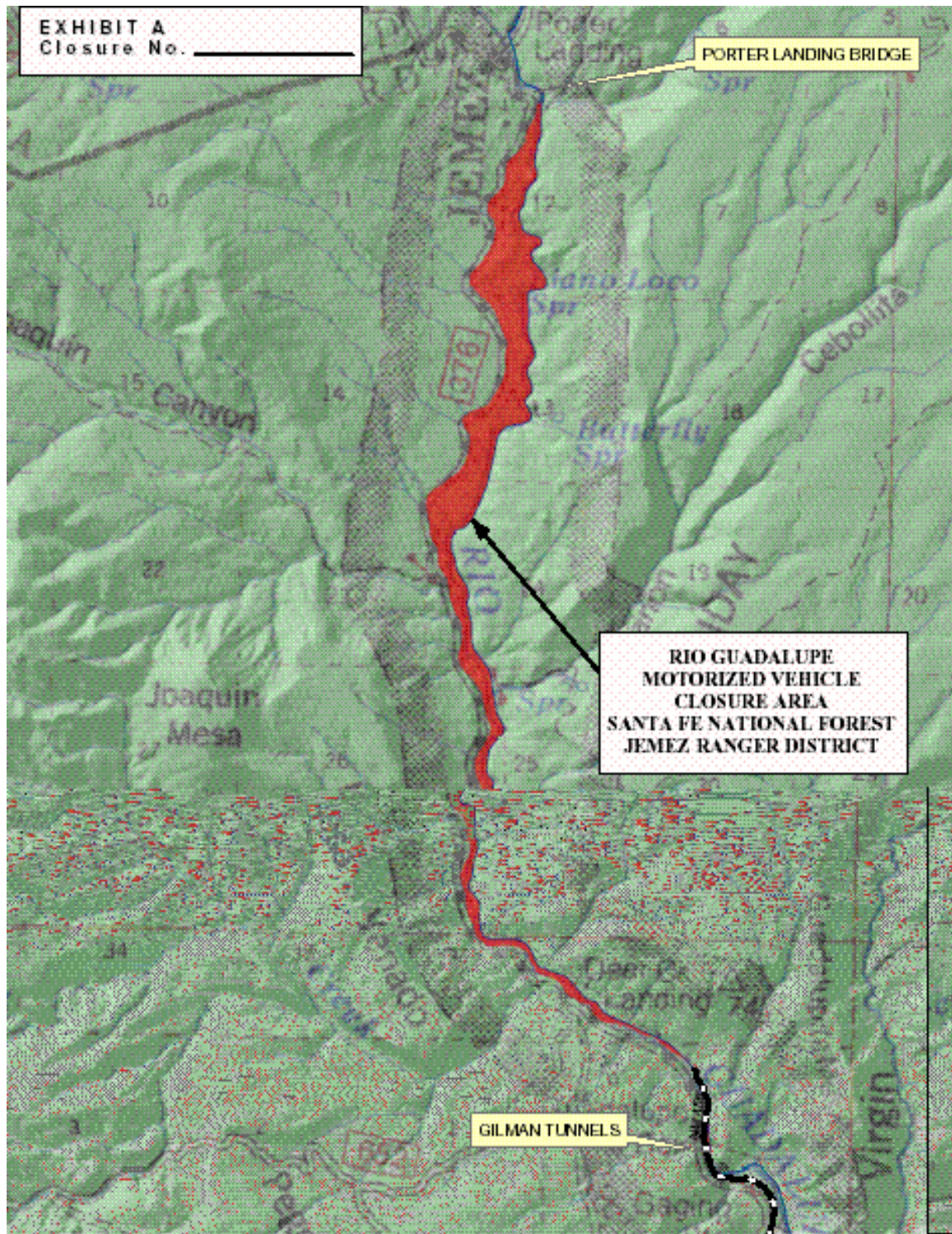
- (1) Persons with a permit authorizing the prohibited activities.
- (2) Any Federal, State, or local officer, or member of any organized rescue or firefighting force in the performance of an official duty.

The Rio Guadalupe Motorized Vehicle Closure Area is in the Rio Guadalupe Canyon starting from the Gilman Tunnel on Forest Road 376.



Violations of these prohibitions are punishable by a fine of not more than \$5,000 for an individual and \$10,000 for an organization, or imprisonment for not more than six months, or both.

Title 16 USC, Section 551, Title 18 USC, Section 3559, and Title 18 USC, Section 3571.



Appendix D

ORDER

MOTORIZED VEHICLE USE CLOSURE

SANTA FE NATIONAL FOREST RIO CEBOLLA AREA

Pursuant To 36 CFR Section 261.50 (a), the following acts are prohibited on National Forest System Land in the area known as the Rio Cebolla Area described in this order and shown in Exhibit A, within the Santa Fe National Forest, State of New Mexico, for resource protection until further notice.

- (1) It is prohibited to possess or use a motorized vehicle off Forest Road 376 between the road and the river and between posted boundaries and the river in the Rio Cebolla Area. Designated parking areas are exempt from the provisions of this order. [36 CFR 261.56]

Rio Cebolla Motorized Vehicle Closure

Santa Fe National Forest

Legend



Closed to All
Motorized Vehicles

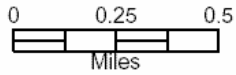
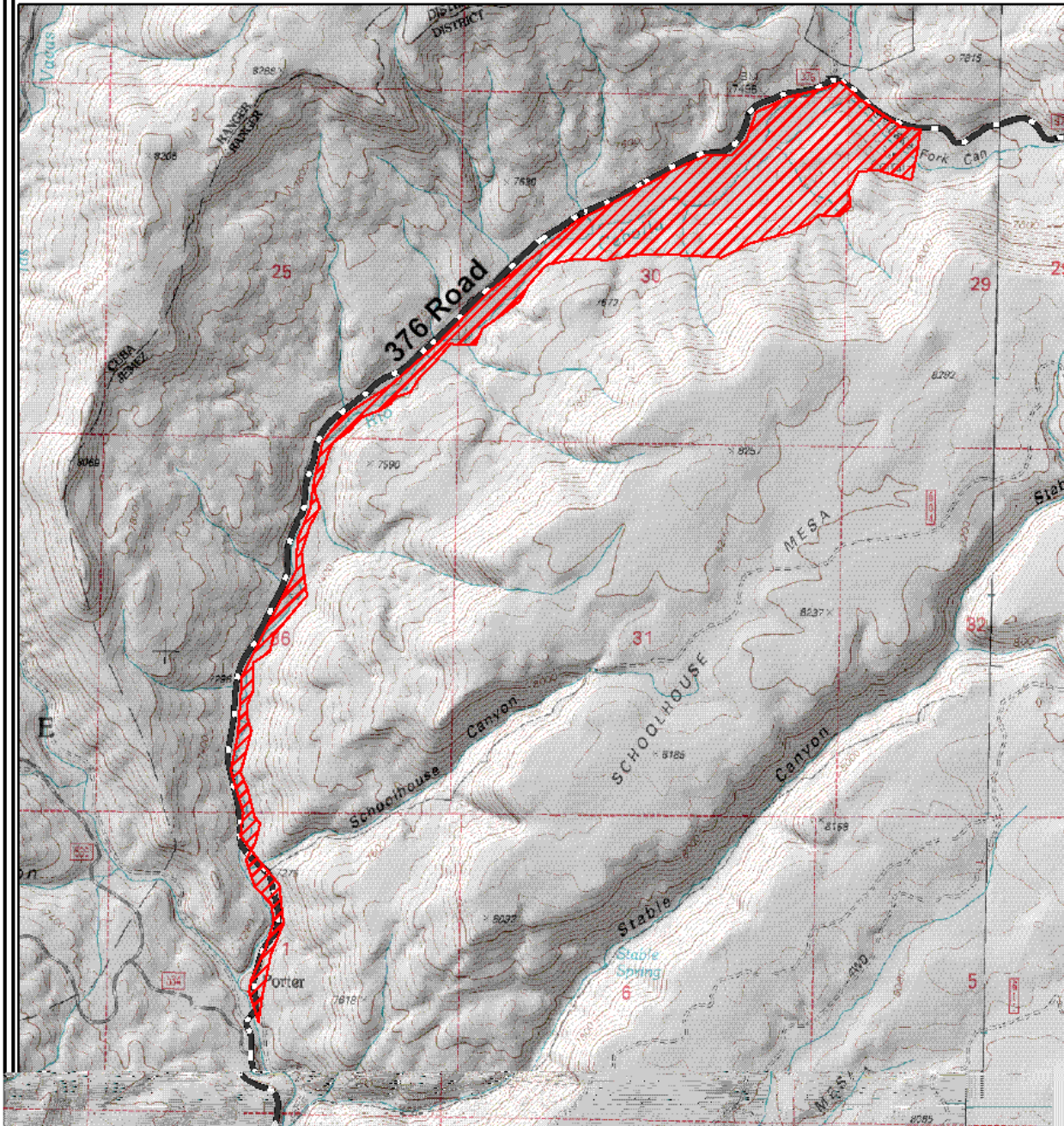


Exhibit A

Order #:



SFNF SOGIS 1-18-95

Appendix E

Figure E1. Respect the Rio signs used in the Guadalupe Watershed. Signs are shown at half size.

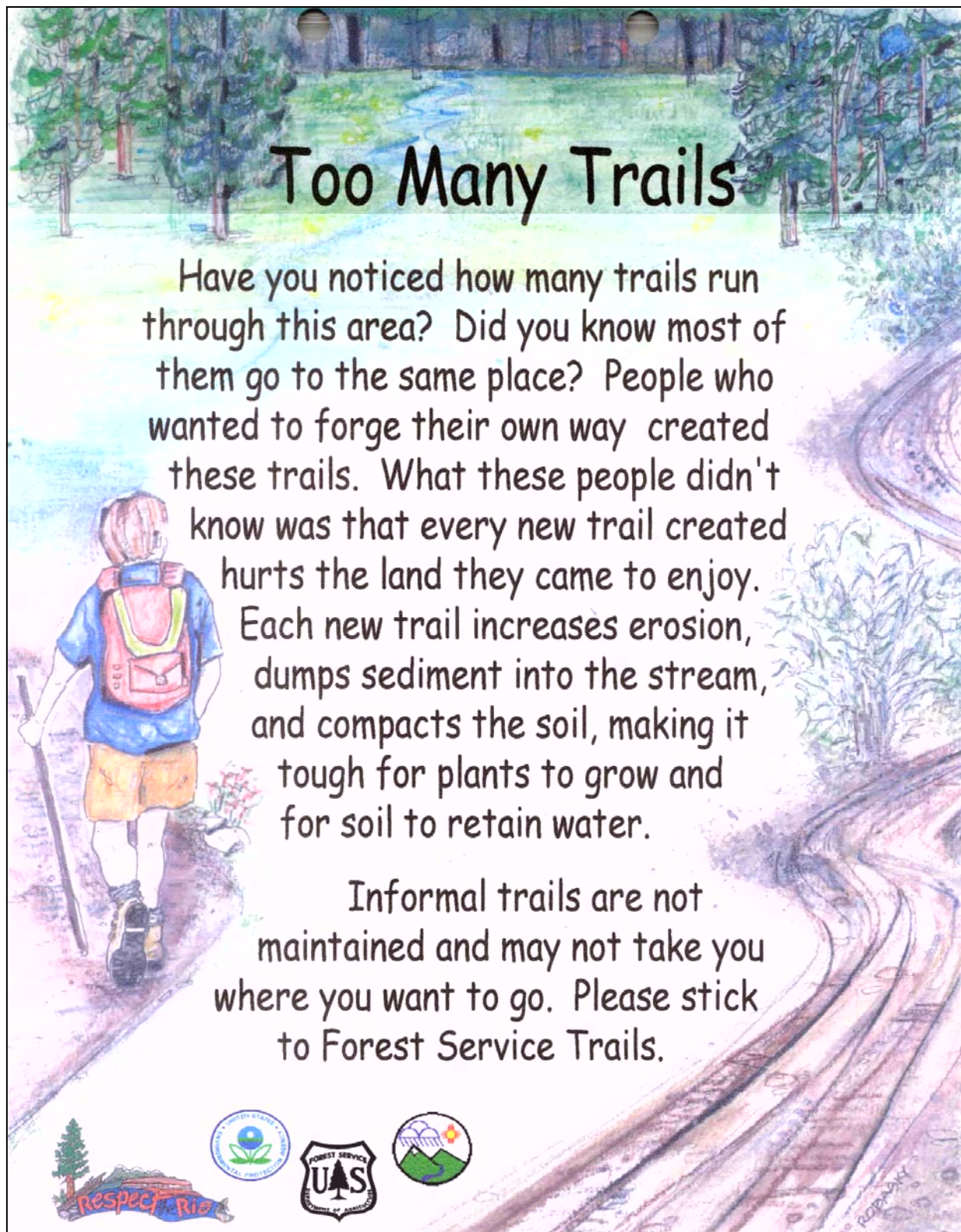


Figure E2. Respect the Rio signs used in the Guadalupe Watershed. Signs are shown at half size.



Figure E4. Respect the Rio signs used in the Guadalupe Watershed. Signs are shown at half size.

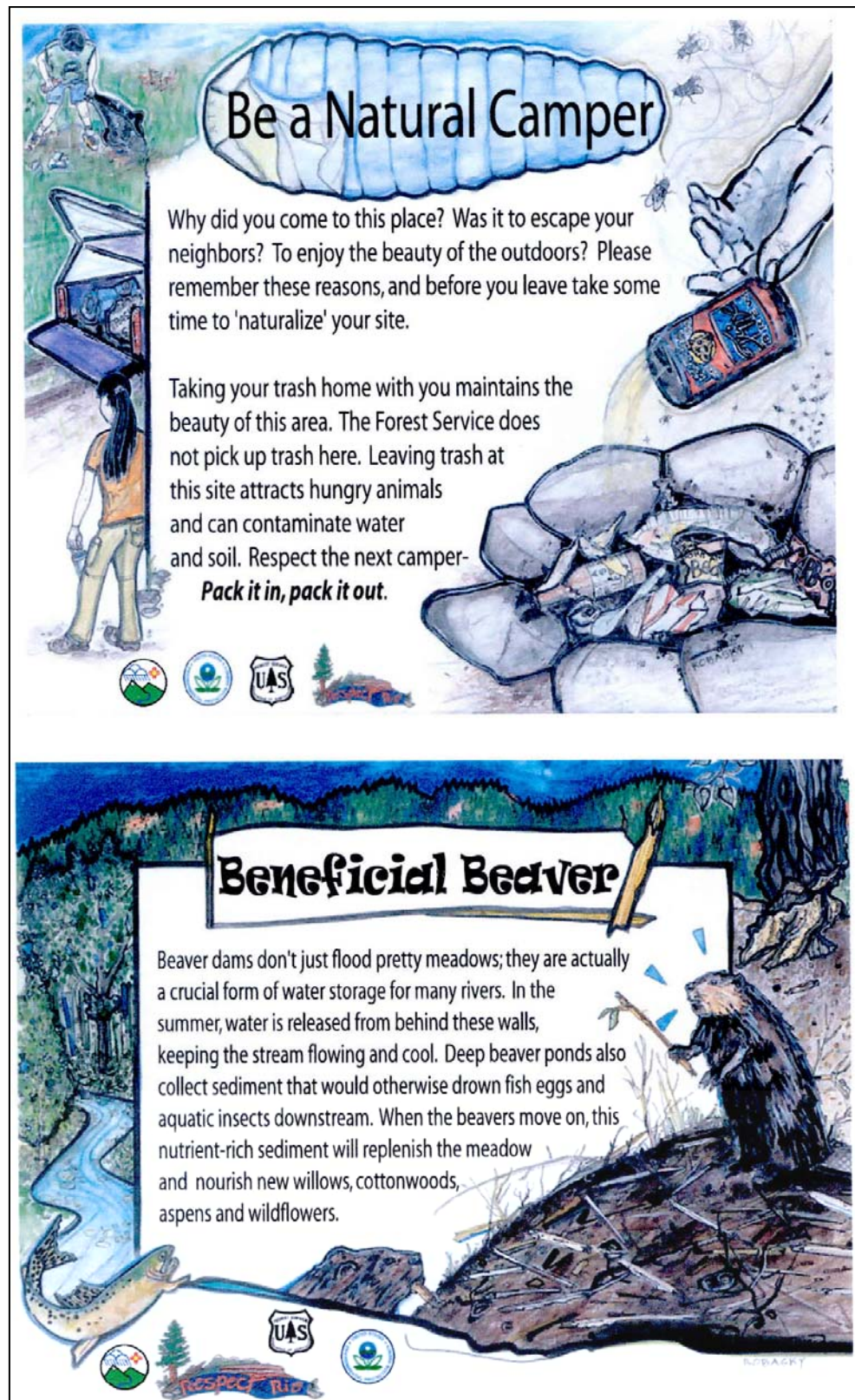


Figure E5. Respect the Rio signs used in the Guadalupe Watershed. Signs are shown at half size.



Figure E6. Respect the Rio signs used in the Guadalupe Watershed. Signs are shown at half size.

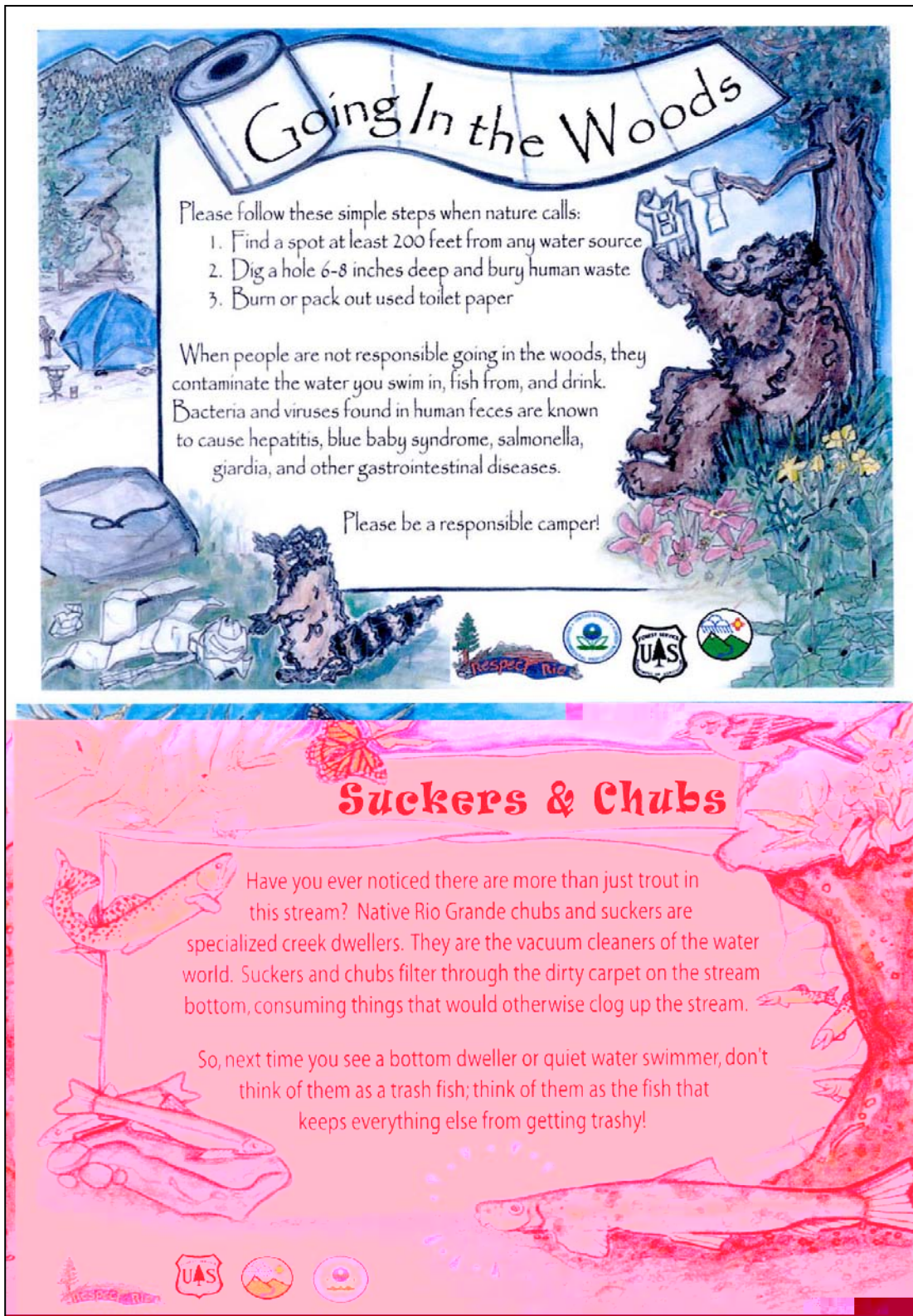


Figure E7. Respect the Rio signs used in the Guadalupe Watershed. Signs are shown at half size.

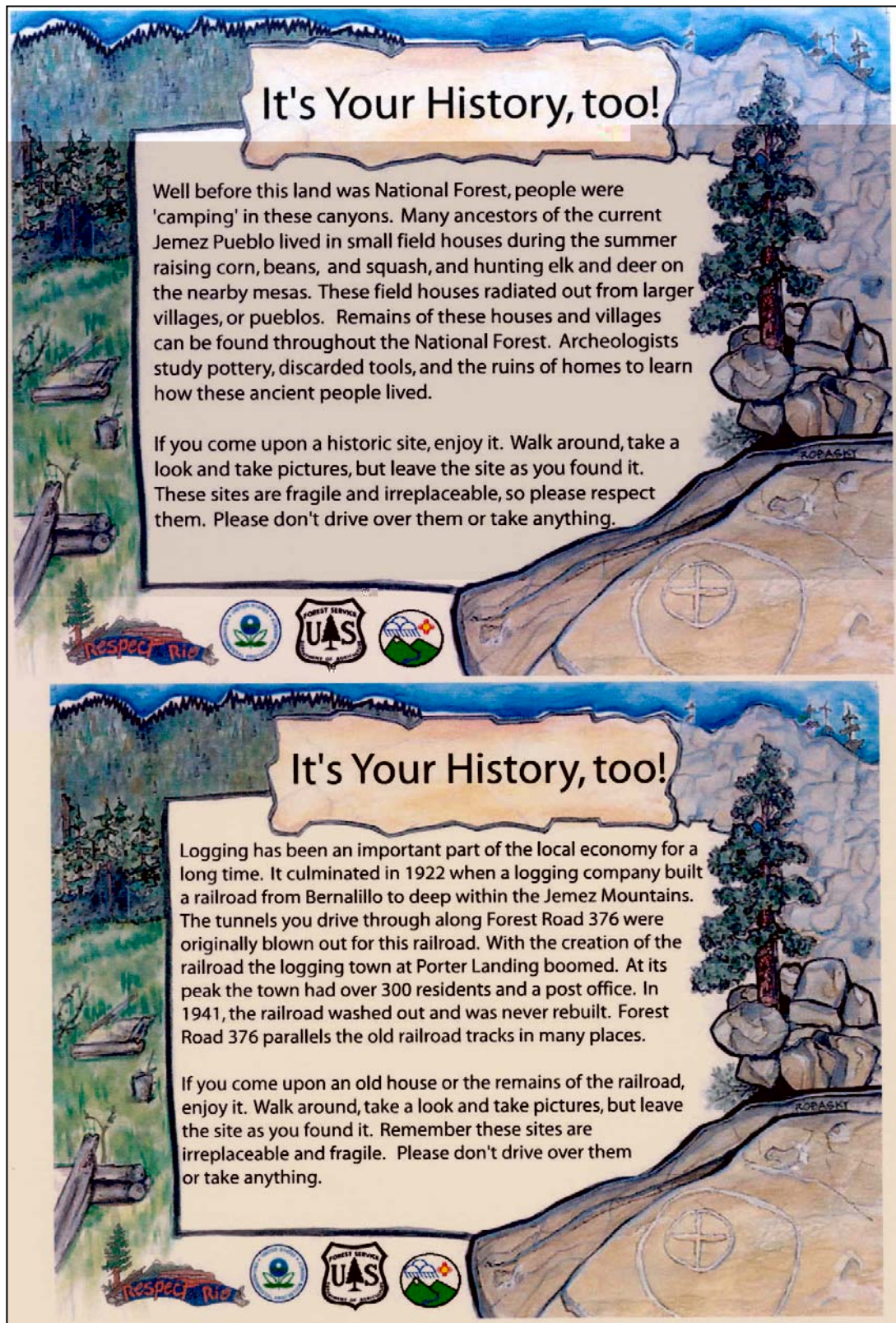


Figure E8. Respect the Rio signs used in the Guadalupe Watershed. Signs are shown at half size.

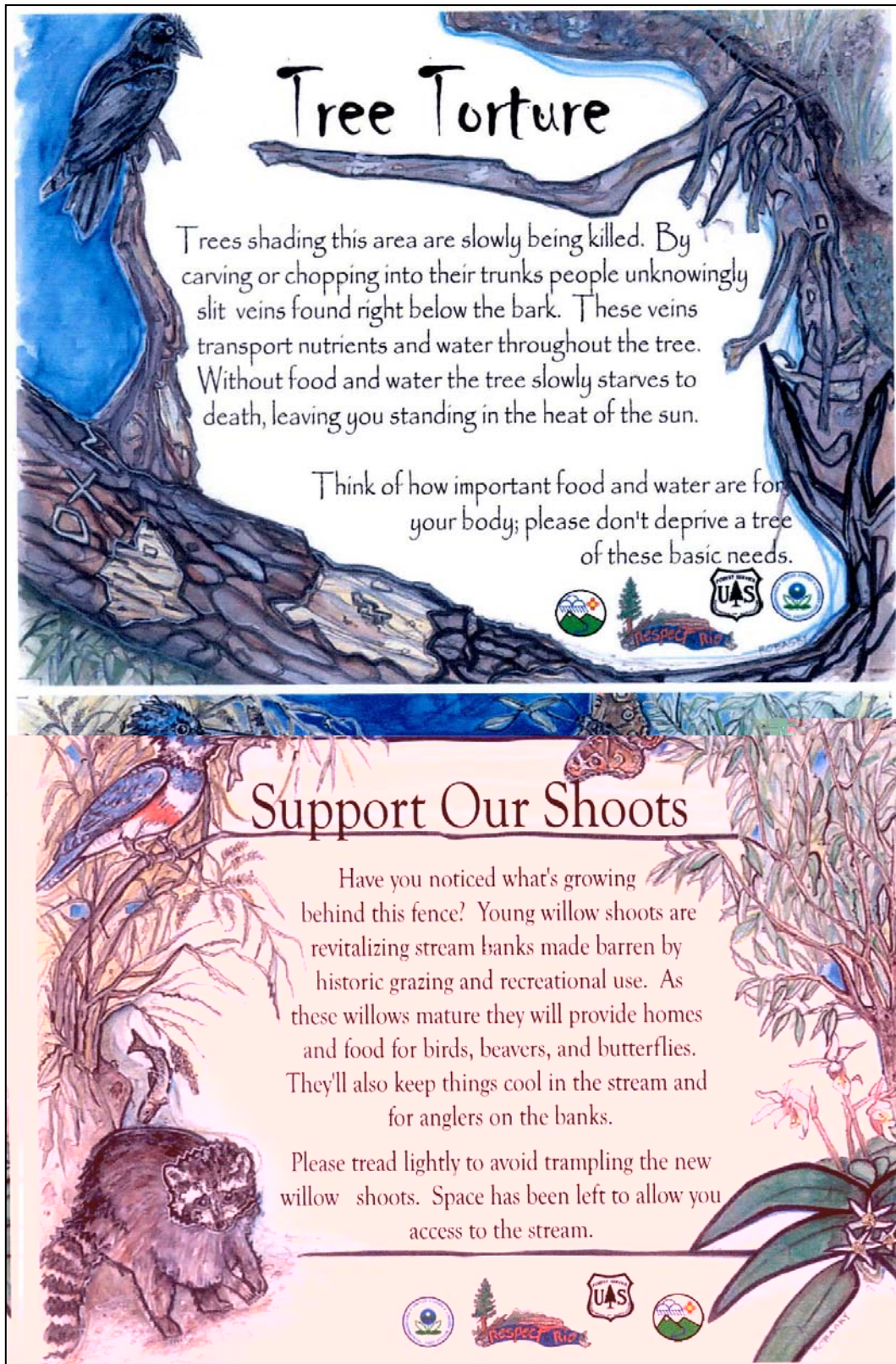


Figure E8. Respect the Rio signs used in the Guadalupe Watershed. Signs are shown at half size.



Appendix F

Table F1. Entire list of other remarks recorded on the social survey data sheets by Contact Rangers.

2004 Other Remarks			
Watershed	Complex Name	# People	Other Remarks
Cebolla	dumbbell	5	Would pay a fee to make sure that someone is patrolling the area.
Cebolla	The Dumbell	4	They asked about future quad restrictions, they want a trail system; against fees
Cebolla	The Dumbell	7	They thought it was good we were coming out
Cebolla	Stairs	9	Police campers with guns (scary with little kids around), suggested volunteers policing campers
Cebolla	the stairs	1	Compared to 20 years ago, 3 X as many ATVs, the area has changed a lot.
Cebolla	tiny turnout	4	Understood that the closure needed to be done and said FS had to do what they did because people aren't responsible campers.
Cebolla	Eroded Vista	4	Supportive of the idea but wants to make sure there are pullouts.
Cebolla	Eroded Vista	12	They want no OHV on forest
Cebolla	eroded vista	4	Father worked in lumber at porter so she has seen the area deteriorate.
Cebolla	party place	20	Asked about maps of camping areas.
Cebolla	Party Place	9	Need to make areas on other side of road, would pay \$5 fee, need public input on closures, should announce public hearing
Cebolla	Party Place	12	Upset about fire restriction
Cebolla	Party Place	4	Very supportive
Cebolla	Party Place	8	They said that people with trailers have their own bathrooms, they aren't as big of a problem as campers
Cebolla	party place	10	Came here when they were kids and it is really different. The reason there are fee areas is because people treat it like this. Saw some tagging on trees.
Cebolla	party place	2	You gotta do what you have to do to protect the forest, the ATVs really tear up the forest area.
Cebolla	Party Place	5	(2 of the 3 adults were non-English speaking)
Cebolla	Party Place	7	They cleaned up others trash and took it to dumpsters
Cebolla	Dirt dropoff	9	Supportive, wanted some trash bins.
Cebolla	Dirt Dropoff	1	Didn't like areas being closed off because of people messing it up in general, not necessarily SFNF
Cebolla	sloping L	3	He had noticed the amount of people and knew there needed to be some control. Everybody's got to do their part, etc.
Cebolla	sloping L	9	Very receptive, ready to move the car, wanted some guidelines.
Cebolla	Sloping L	6	Wants changes, there is too much traffic, the river is polluted, they had 2 dogs without leashes
Cebolla	Sloping L	17	Would like to leave areas for RV camping, was glad we let them know what was going on.
Cebolla	Sloping L	4	If you fix up pull offs nice for RVs then it would be good
Cebolla		3	Talked to them earlier this summer, has noticed change, more vegetation in areas that have been closed off, used to see thousands of trails, but now vegetation has grown over some of them.
Cebolla	Cebolla Arc	2	Offered to volunteer; works for Forest Service in Mountainair; going to use hot springs
Cebolla	Cebolla Arc	5	Flatten out some areas for RVs, It's good to see you out here to encourage people to pick up trash. Worried about the cattle effecting the river, but has seen less cattle this year.

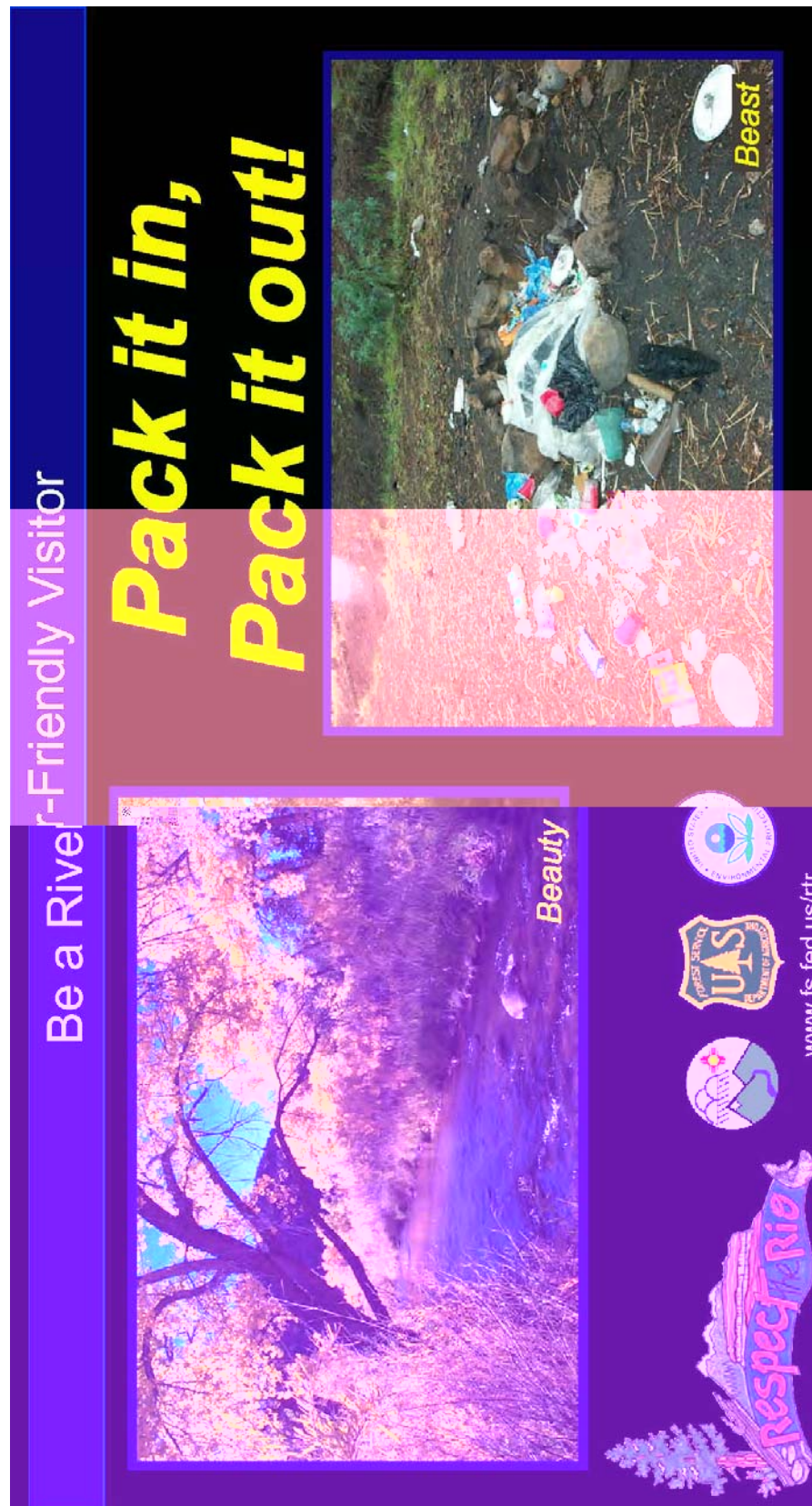
Cebolla	Birdcage Drive	5	"It's like one giant toilet." "It's like a rock concert without port-a-potties."
Cebolla	Birdcage Drive	4	PEOPLE NEED TO TAKE RESPONSIBILITY for the area (went back later and the same guys had left all of their trash)
Cebolla	Birdcage Drive	5	Heard about us via the news and game and fish newsletter.
Cebolla	Birdcage Drive	6	Read the RtR signs
Cebolla	Fence	5	They said it's too bad we all have to suffer from the closures
Cebolla	Fence	11	Read RtR signs on the fence posts.
Cebolla	All in one	2	They usually camp in the Pecos area.
Cebolla	All in One	12	If there were spots cleared on the other side of the road, people would use them.
Cebolla	All in one	12	Wanted to be able to have RV's still close to the river.
Cebolla	All in One	2	Wife receptive but husband angry; he doesn't want closure, tent campers make a bigger mess with toilet paper; trailers are contained
Cebolla	ALL in one	20	Make sure there are spots for RVs.
Cebolla	All in One	4	"The point of camping is to camp by the river"
Cebolla	All in One	30	Well, they (campers) are going to piss in the river anyway, (pig roast event)
Cebolla	ATV Hill	2	Good to keep people back, a little hiking won't hurt.
Cebolla	Private landing	2	Like taking friends up here to show them the area. Very Supportive, garbage hidden under trees from previous visitors.
Cebolla	Cebollita Springs East	25	Not a bad idea to have walk-in camping; it's too bad they're closing the area; they should have more signs
Cebolla	Aspen Meadows	1	Glad you are looking out for things here, I really enjoy the area.
Cebolla	Mixed Conifer North	2	Very negative/unsupportive; had been out here "longer than you've been around"; not very nice people; very angry with FS & possible fee area- thinks fees will only support hiring new personnel & not make anything better
Cebolla	Ponderosa Group	6	Was enthusiastic about teaching others how to poop
Cebolla	ponderosa group	30	Really liked the signs. Would like FS to compensate closed areas by opening up other areas. If we do buck & pole to leave enough spaces to park an RV so it is at least 10 ft or more from the edge of the road.
Cebolla	Ponderosa Group	10	Had read an article in the newspaper about our program. Very supportive of education.
Cebolla	Ponderosa Group	12	Don't mind the fence as long as they can get a pop-up by it.
Cebolla	Ponderosa Group	7	Thought that making it a fee area would be a good idea. Asked if it was safe to fish.
Cebolla	Ponderosa Group	4	Has noticed how bad it has gotten, remembers how beautiful it was.
Cebolla	604 Access	3	Very concerned about protecting natural resources
Cebolla	604 Access	3	Spanish speaking (Kavita had conversation with them in Spanish); we should translate RtR handout in Spanish
Cebolla	604 Access	4	Wanted to camp at Fenton Lake but it was full; they were excited to know there was other developed (dispersed) camp sites in the area
Cebolla	Meadow Fork	2	She was glad we let her know about the changes we are doing

Cebolla	Meadow Fork	17	They appreciate what we are trying to do
Cebolla	ponderosa group west	9	We're glad you're doing this, we needed it 20 years ago. We need the water clean.
Cebolla	Ponderosa Group West	3	Supported education, but not really the fences. People aren't really the problem, the water is dirty because of the ash from the fires.
Cebolla	Ponderosa Group West	11	Wants this to be a fee area with toilets
Cebolla	Ponderosa Group West	2	Heard about RtR by reading our interpretive signs
Cebolla	Mixed Conifer	10	It's good to see you out here. Put in a toll booth & charge \$5 to pay for someone to patrol & pickup trash. Has noticed a good difference this year
Cebolla	mixed conifer	12	Would like established campgrounds.
Cebolla	Mixed Conifer	6	Happy about improving fishing, come here to get away from the neighbors. Government needs to be more accountable for how it spends money, rather than putting so little money into an area with so many people that use it.
Cebolla	Mixed Conifer	2	They haven't been coming much lately because of all the trash in the area; they have 3 dogs
Cebolla	Mixed Conifer	8	Education is crucial but it needs to be fair. The loggers, Ranchers, hikers and ATVs are all part of a package, when you restrict access to one, the forest falls apart, the forests are dying. Management is the key, not environmentalism.
Cebolla	Mixed Conifer	2	People did not seem receptive to Cebolla being closed next year
Cebolla	Circle of Trees	3	Too many people on 376, they need to slow down when they are driving; very supportive
Cebolla	double horseshoe	8	Were planning on fishing but the river was too low.
Cebolla	Double Horseshoe	3	Wants to volunteer to help
Cebolla	ponderosa cluster	6	Wants ATV restrictions. Would like to see established campgrounds for RVs
Cebolla	Ponderosa Cluster	2	Talked to them 2 weeks ago, didn't want to talk again.
Cebolla	Dirt Dropoff	13	They picked up some trash from previous campers
Guadalupe	the long haul	1	Angry about other campers who had let off fireworks that morning. Also angry about irresponsible campers causing the closure.
Guadalupe	the long haul	2	Liked the idea of improving the fishing.
Guadalupe	juniper junction	1	"Don't close the road to San Antonio!!" "Don't completely close area; keep some primitive camping available, to try and restore."
Guadalupe	Rocky Road	2	They support the organizations that fund RtR (New Mexico Trout); walk in fishing, parked by buck-n-pole fence
Guadalupe	Concrete Pod	1	Didn't like not being able to drive to river
Guadalupe	Concrete Pod	7	Visited same site 3-4 times last year; knew closure was coming
Guadalupe	Porter	11	We should be doing more to clean up
Guadalupe	Poter	4	Wanted to know if we would open the sites once they were restored.
Guadalupe	closure gate	2	Wasn't good fishing
Guadalupe	Deer creek landing	2	Helping clean up trash. Camped at paliza, just here for the day.

Guadalupe	Deer Creek Landing	7	Keep ATV out of water; RtR is a good thing
Guadalupe	Corrals	1	Put in stiles or gates
Guadalupe	shady grove	1	Liked having fewer people near the river. Fishing was ok, he caught 7 fish.
Guadalupe	shady grove	1	New Mexico Trout member, fishing was slow.
Guadalupe	shady grove	2	Concerned about the removal of browns through poisoning just to bring back RGCT.
Guadalupe	roundabout peak	6	Understanding of closure
Las Vacas	GS East (Ojitos gate)	8	Noticed fishing has declined
Las Vacas	Stumps	4	It's a shame that the good people have to pay for what the bad people do; wouldn't mind paying a fee if it meant more Forest Service patrol
Las Vacas	Stumps North	2	Educating the young who don't have someone to teach them about camping is good
Las Vacas	Vacas U	9	ATVs need to stay in the city; told kids to leave area cleaner than when you came
Las Vacas	Vacas U	4	Always try to leave the site better than they found it.
Las Vacas	Anvil	10	Wants receptacle for trash; would rather clean up after themselves and not pay a fee
Las Vacas	Boulder Bench	8	Very crowded, the busiest they have ever seen. Talked to them earlier this summer. They had 2 dogs
Las Vacas	Boulder Bench	2	"You're doing a good thing"
Las Vacas	Boulder Bench	8	Likes the peace and quiet.
Las Vacas	Beaver Dam	4	"It's about time we started respecting the rio." , "We want to preserve this place for our children's children." Wanted to volunteer to help.
Las Vacas	Beaver Dam	2	Doesn't like people cutting down trees to get RV's in. Patrols for cigarette firestarters, enjoys area for ORV.
Las Vacas		6	Kept saying we belong to the earth the earth doesn't belong to us.
Las Vacas	Vacas West	2	He likes a clean site, but doesn't want a fee area.
Las Vacas	Road 20 L	20	Want ATVs to slow down.
Las Vacas	Open Camp	7	Don't see as much wildlife as they used to. Lots of people this year.
Las Vacas	Vacas View	2	They were against the fencing but say, keep up the good work, would be willing to pay a fee.
Las Vacas	Vacas View	2	Suggest sandblasting tunnel area, will volunteer; ATV problems - broke weld to access; thought closures were good; tree damage; 539 superhighway
Las Vacas	Vacas North	13	Too many people cause more damage than the cattle. Beaver is active at this site.
Las Vacas	Fishing Pullout	3	Upset about closure and wanted to know how long it would be closed.
Las Vacas	Grassy Circle	1	Very concerned about habitat destruction; toilet paper in site
Las Vacas	Grassy Circle North	2	He thinks there needs to be an alternative place to camp

Appendix G

Figure G2. Ad shown in Century Rio 24 Theaters in Albuquerque, NM.



Literature Cited

- New Mexico Environment Department, Surface Water Quality Bureau. 2002. Total Maximum Daily Load (TMDL) Report for the Jemez River Watershed. Santa Fe, NM. 197+ pp.
http://www.nmenv.state.nm.us/swqb/Jemez_Watershed_TMDLs/Coverpage+Preface.pdf
- USDA Forest Service, Santa Fe National Forest. 2003. Respect the Rio Annual Report 2003: Dispersed Recreation Component. Jemez Springs, NM. 52 pp.
http://www.fs.fed.us/r3/sfe/fish/reports/respect_the_rio%20reports/RTR_annual_report_2003.pdf

Acknowledgements

We heartily thank the New Mexico Environment Department for their financial support. NMED had the foresight to believe in this concept and fund this program under a Clean Water Act 319 Grant. We are grateful for Nina Wells' enthusiastic support of the Respect the Rio program.

In addition, we received great support from the Student Conservation Association, New Mexico Trout, and Trout Unlimited. Various educational committees, such as Albuquerque Water Festival and Santa Fe Water Festival, were great partners in helping us spread the word. Local schools, such as Jemez Valley Public Schools, Riverside Charter School, and Menaul School, were wonderful collaborators.

The Education Team wishes to thank the Jemez and Cuba Ranger Districts for their strong support and welcoming atmosphere, especially Erica Nevins.

SCA interns – Sarah Martiny and Alex Kirkpatrick – were the heart and soul of the 2004 Contact Ranger program. We couldn't have done without them.

The Education Team wishes to thank James Adams, Becky Studen, Bill Dowdy, and Becca Wassell for their creativeness and patience in developing the Respect the River/Rio website.

Much gratitude to Deb Robasky for her artistic vision in creating the backgrounds used for the Respect the Rio signs.

The Education Team wishes to thank Recreation, Range, Hydrology, Wildlife, Fisheries, Fire and Roads for their collaborative efforts to make Respect the Rio a holistic approach to watershed restoration.

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